

The World of Cumulative Trauma Claims

[Enter Report](#)





Table of Contents

Area 1: Claim Reporting Patterns

1. [Percent of Indemnity Claims that are CT](#)
2. [Percent of Claims Unreported](#)
3. [Number of Years until 98% of Claims are Reported](#)

Area 2: Region & Industry Differences

4. [Percent of Total Claims that are CT by Region](#)
5. [Percent of Indemnity Claims that are CT by Region](#)
6. [Distribution of Indemnity Claims by Industry – Policy Year 2008](#)
7. [Distribution of Indemnity Claims by Industry – Policy Year 2015](#)
8. [CT Claims by Industry and Region – Agriculture and Mining](#)
9. [CT Claims by Industry and Region – Construction](#)
10. [CT Claims by Industry and Region – Manufacturing](#)
11. [CT Claims by Industry and Region – Wholesale and Retail Trade](#)
12. [CT Claims by Industry and Region – Utilities, Transportation & Warehousing, and Public Admin](#)
13. [CT Claims by Industry and Region – Information](#)
14. [CT Claims by Industry and Region – Finance & Insurance](#)
15. [CT Claims by Industry and Region – Real Estate](#)
16. [CT Claims by Industry and Region – Professional Services](#)
17. [CT Claims by Industry and Region – Administrative](#)
18. [CT Claims by Industry and Region – Education](#)
19. [CT Claims by Industry and Region – Health](#)

20. [CT Claims by Industry and Region – Arts & Entertainment](#)
21. [CT Claims by Industry and Region – Hospitality](#)
22. [CT Claims by Industry and Region – Other Services](#)
23. [CT Claims by Industry and Region – Outside Sales & Clerical](#)
24. [Percent of CT Claims by Average Weekly Wage](#)
25. [Percent of CT Claims by Industry and Average Weekly Wage](#)
26. [Distribution of Indemnity Claims in LA and San Diego by Wage Level and Industry](#)

Area 3: Claim Characteristics from Detailed Survey Data

27. [Characteristics of Surveyed CT Claims](#)
28. [Post-Survey CT Claim Development – Post-Termination Claims for AYs 2012-2014](#)
29. [Post-Survey CT Claim Development – Denied Claims for AYs 2012-2014](#)
30. [Post-Survey CT Claim Development – Claims w/Specific Component for AYs 2012-2014](#)
31. [Post-Survey CT Claim Development – Claims w/Specific Component for AYs 2007-2010](#)
32. [Post-Survey CT Claim Development – Represented Claims for AYs 2012-2014](#)
33. [Post-Survey CT Claim Development – Represented Claims for AYs 2007-2010](#)
34. [Additional Characteristics of Surveyed Claims](#)
35. [Average Applicant’s Legal Costs](#)



Table of Contents (...continued)

Area 4: Medical Service Characteristics

36. [Medical Services Paid on CT Claims as a Percentage of Total Paid](#)
37. [Medical-Legal Cost Trends](#)
38. [Lien Filings for 2013 through 2016](#)
39. [Top Seven Medical Diagnoses](#)
40. [Share of Total Medical Payments by Service Type – 1st Development Year](#)
41. [Share of Total Medical Payments by Service Type – 5th Development Year](#)
42. [Share of Total Medical Payments by Service Type – 10th Development Year](#)
43. [Share of Total Medical Payments by Provider Type – 1st Development Year](#)
44. [Share of Total Medical Payments by Provider Type – 5th Development Year](#)
45. [Share of Total Medical Payments by Provider Type – 10th Development Year](#)
46. [Share of Total Medical Services Paid by Age and Service Type – Physician Services](#)
47. [Share of Total Medical Services Paid by Age and Service Type – Inpatient Services](#)
48. [Share of Total Medical Services Paid by Age and Service Type – Outpatient Services](#)
49. [Share of Total Medical Services Paid by Age and Service Type – Medical Supplies and Equipment \(HCPCS\)](#)
50. [Share of Total Medical Services Paid by Age and Service Type – Medical-Legal](#)
51. [Share of Total Medical Services Paid by Age and Service Type – Liens](#)
52. [Share of Total Medical Services Paid by Age and Service Type – Pharmaceuticals](#)
53. [Share of Total Pharmaceutical Paid by Dispensing Place](#)
54. [Share of Total Pharmaceutical Paid by Drug Type](#)

Area 5: Impact on Underlying Cost Trends

55. [Change in Indemnity Claim Frequency](#)
56. [Permanent Partial Claims per 100,000 Employees](#)
57. [Indemnity Age-to-Age Development](#)
58. [Medical Age-to-Age Development](#)
59. [ALAE Age-to-Age Development](#)
60. [Indemnity Severity Development Comparison](#)
61. [Change in Indemnity per Indemnity Claim](#)
62. [Medical Severity Development Comparison](#)
63. [Change in Medical per Indemnity Claim](#)
64. [Ultimate ALAE per Indemnity Claim](#)
65. [Percent of Claims with Significant Defense Costs](#)
66. [Ratios of ALAE to Loss](#)
67. [Percent of Claims Closed at 18 Months](#)
68. [Percent of indemnity Claims Open at 60 Months](#)
69. [Indicated Average Advisory Pure Premium Rates](#)

[More Info](#)



Introduction

What is CT?

Most workers' compensation injuries occur as a result of a single incident or exposure which causes disability or the need for medical treatment. These injuries are often referred to as "specific" injury claims and typically involve only one insurer and a single date of accident.

Some workers' compensation injuries occur as a result of repetitive mentally or physically traumatic activities extending over a period of time. Although these cumulative trauma, or CT, claims can have exposure periods that span multiple years, by California law for workers' compensation purposes, the liability for most CT claims is spread over the last year of injurious exposure. However, this last year of exposure will usually involve multiple insurance policies and often multiple insurers. CT claims are also more likely to involve multiple injured body parts, long delays between the injury occurrence and the time the claim was filed, representation of the claimant by an applicant's attorney, and frictional costs such as liens and medical-legal costs.

CT claims have always been a part of the California workers' compensation system. Recently, although overall claim frequency and average indemnity and medical costs have been flat to declining, the proportion of claims involving CT has increased sharply. This report explores the world of CT claims including how they differ from specific injury claims and the key drivers of the recent CT claim increases.





Summary of Key Findings

1. CT claim rates have grown by 50% since 2008. ([Chart 1](#))
2. CT claim reporting is significantly slower than for specific injury claims, and the reporting of CT claims has become slower in recent years. ([Chart 3](#))
3. All recent CT claim growth is in the Los Angeles and San Diego regions, which now generate 75% of CT claims but only 50% of other claims. ([Chart 5](#))
4. Recent CT claim growth is spread across many industries in the Los Angeles region, though the Manufacturing and Hospitality sectors have experienced the most significant growth rates. ([Chart 10](#) and [Chart 21](#))
5. CT claim growth in Southern California is concentrated in lower wage workers. ([Chart 24](#))
6. About 40% of recent CT claims are filed after the employee is terminated, about three-quarters are initially denied in part or in whole, and about one-quarter also involve an accompanying specific injury claim. ([Chart 27](#))
7. CT claims incur significantly more medical-legal and lien payments than other types of claims, particularly at early and mid-maturity levels. ([Chart 36](#))
8. CT loss payouts are much slower than for specific injury claims and on average ultimate costs for CT claims are higher than for specific injury claims. ([Chart 62](#))
9. CT claims stay open longer than other claims, but claim settlement rates have accelerated across all claim types. ([Chart 67](#))





Area 1: **Claim Reporting Patterns**

CT claims represent a growing share of all indemnity claims. Although initially thought to be a consequence of the Great Recession, CT claims have continued to grow at a significant rate through the economic recovery. CT claims are also much more likely to be reported late, so early estimates of CT claim proportions typically understate the true proportions for an accident year.

This area sets the stage for the study with the latest CT claim proportions and explores how the late reporting nature of CT claims has contributed to recent trends.





Chart 1

- CT claim proportions had been consistent for many years but started rising in 2008.
- The Great Recession was thought to be the cause of CT claim growth through 2010, but CT claims continued to grow much more significantly starting from 2013.
- Preliminary 2016 data suggests that the growth in CT claims may be slowing.
- The gap between CT claim proportions at earlier periods and later periods has widened as significantly more CT claims are being reported later.

Summary
of Key Findings

More Info

Percent of Indemnity Claims that are CT

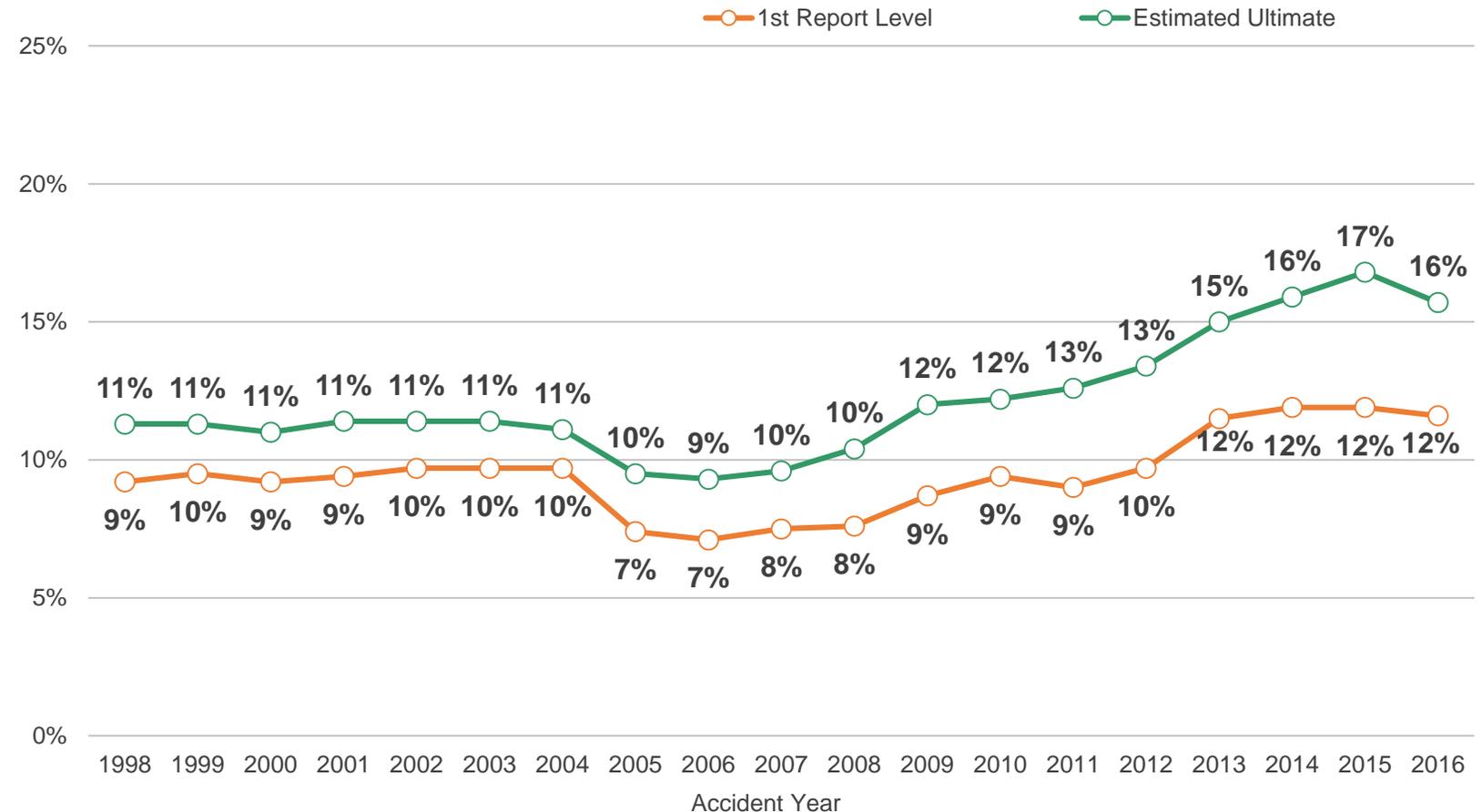




Chart 2

- One-third of CT claims remain unreported at 1st report level (18 months) compared to 6% of specific injury claims.
- Over half of all claims reported after two years of the year of injury are CT claims.
- Over half of the total losses paid on CT claims in later periods comes from the late reported claims.

Percent of Claims Unreported

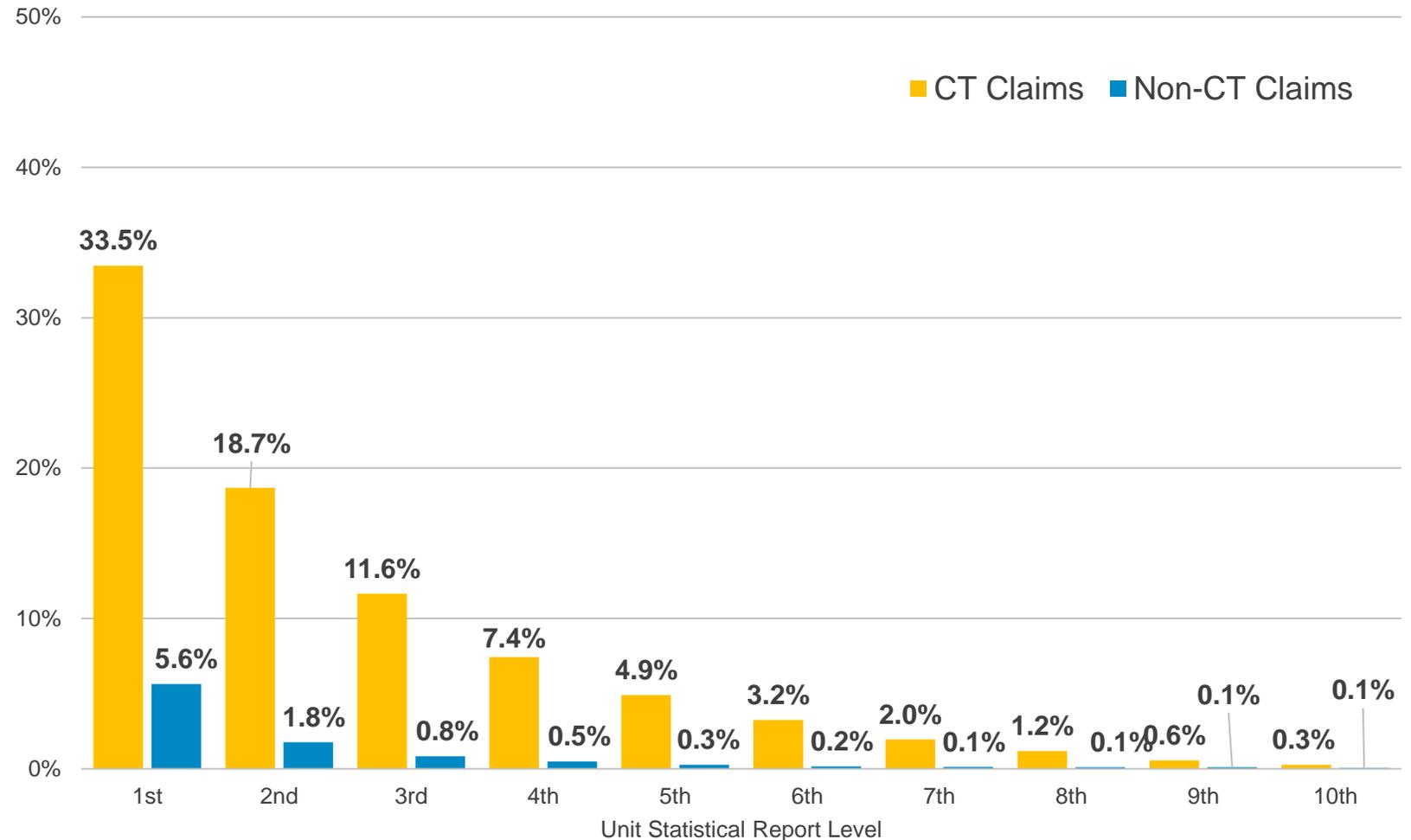




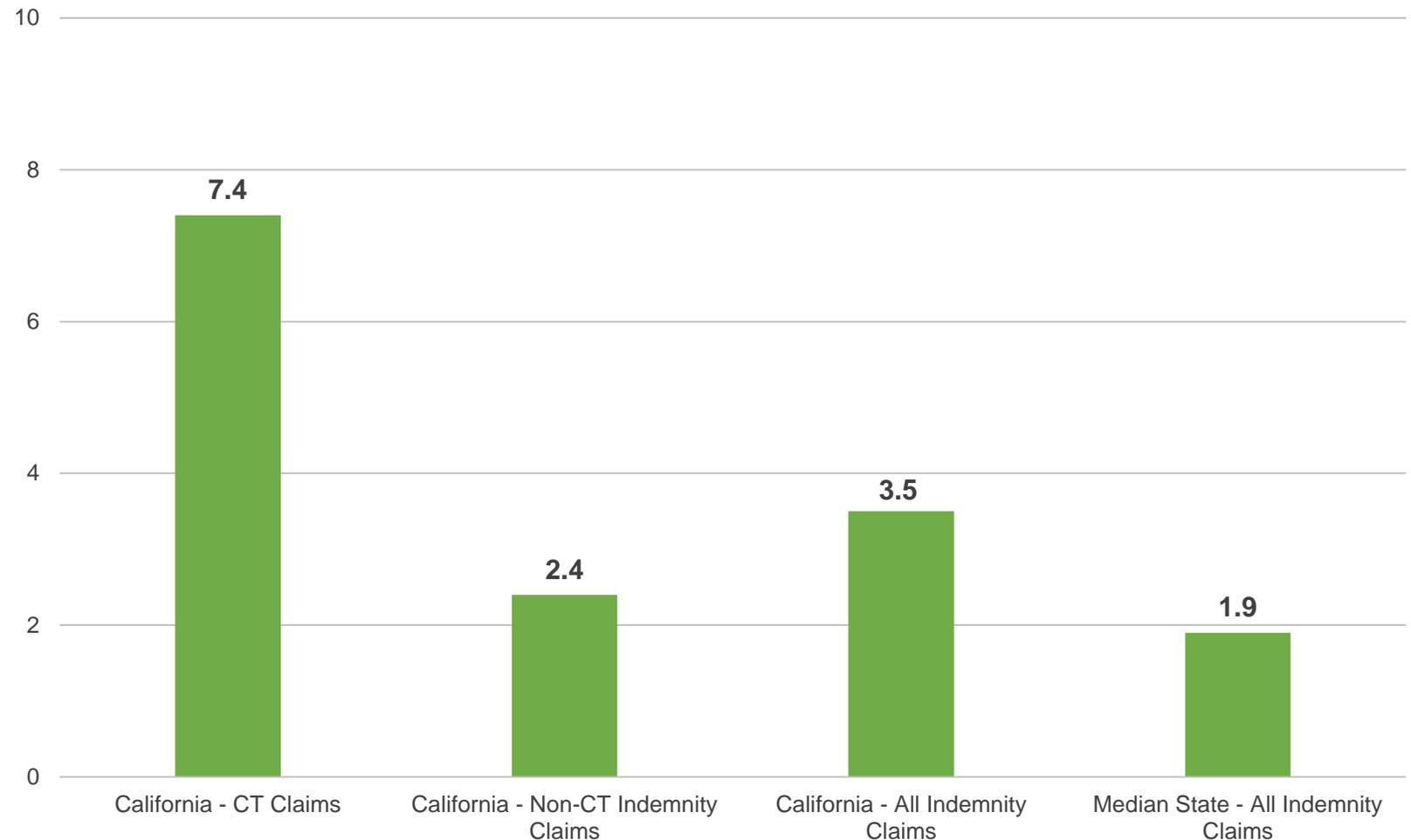
Chart 3

- It takes over 7 years for CT claims to be 98% reported, 3 times as long as for specific injury claims.
- CT claims are a significant driver of the slower claim reporting in California, as specific injury claim reporting patterns are more similar to those from other states.

Summary
of Key Findings

More Info

Number of Years until 98% of Claims are Reported





Area 2: Region & Industry Differences

Like many cost components, CT claim rates differ significantly across the regions of California. While the proportion of CT claims has typically been higher in the Los Angeles Basin, these rates have diverged significantly over the last several years and are also showing a similar pattern in San Diego.

This area explores differences in CT claim rates by region as well as by industry and wage level. CT claim rates differ significantly by industry and the industrial mix also differs significantly across regions of California. In particular, recent CT claim growth has been greatest in the Manufacturing, Hospitality, and Real Estate industries in the Los Angeles Basin. Conversely, the more rural areas of the state with a higher proportion of Agriculture have experienced flat to declining CT rates. There has also been growth in lower wage worker CT claims in the Los Angeles Basin, though these increases are correlated with the growth in some of the lower wage paying industries such as Hospitality.

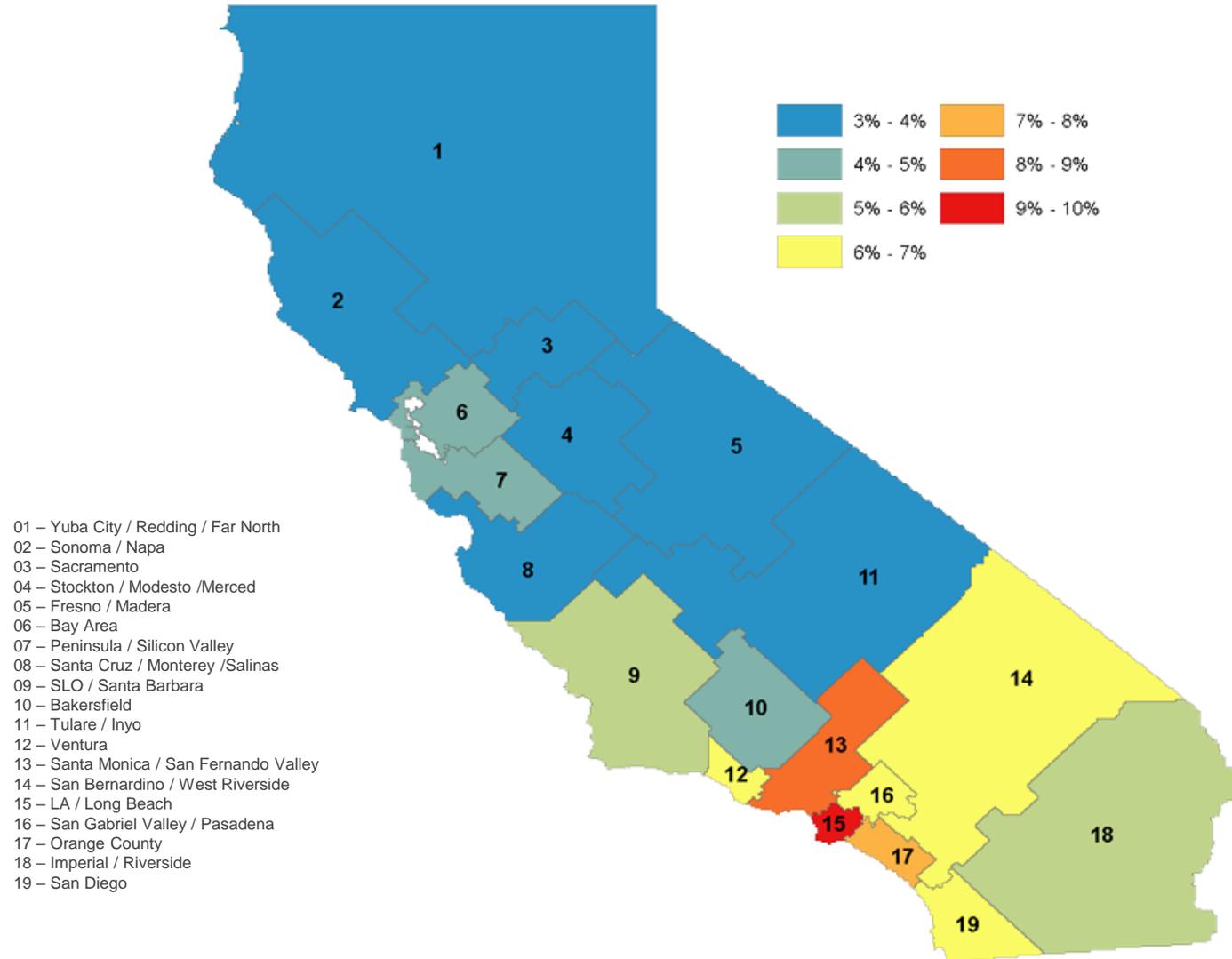




Chart 4

- Northern California regions have relatively lower CT claim rates, with the lowest rates in the Santa Cruz/ Monterey/Salinas area.
- Southern California regions in general have higher CT claim rates.
- The highest rates are in the Los Angeles/Long Beach area, which are more than 3 times greater than other regions.

Percent of Total Claims that are CT by Region



More Info



Chart 5

- CT claims had historically trended consistently throughout the state, with the lowest rates in the more rural areas.
- All of the recent growth in CT claims has been in the Los Angeles and San Diego regions.
- CT claim rates in other regions of California have declined and are lower than the 1998 levels.

Summary of Key Findings

More Info

Percent of Indemnity Claims that are CT by Region

Accident Year at 1st Unit Statistical Report Level

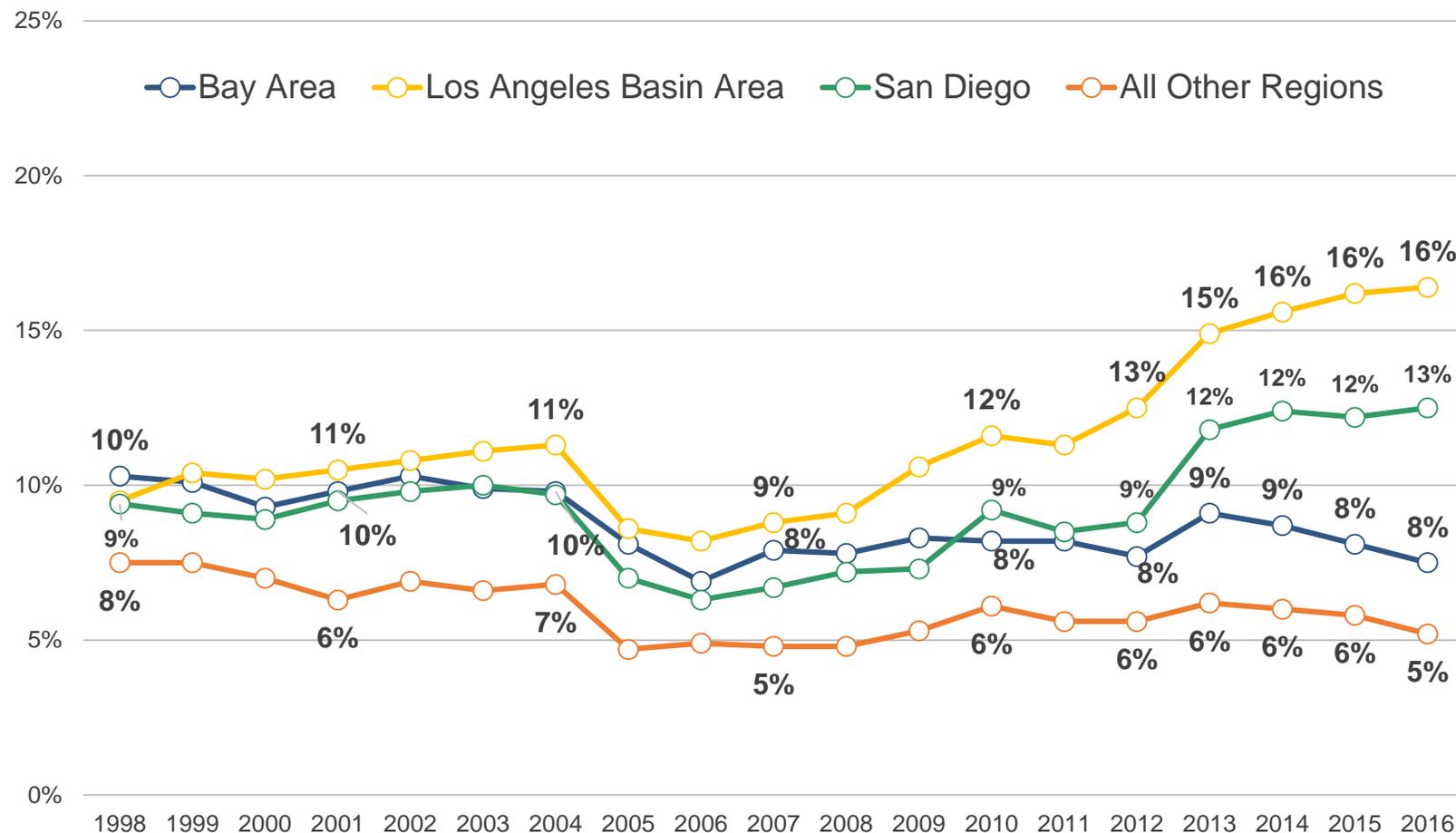




Chart 6

- 10 years ago, the majority of CT claims were concentrated in the Manufacturing and white collar sectors (Clerical, Information, Finance & Insurance, Professional Services).
- White collar sectors also had about double the share of CT claims compared to non-CT claims.
- The Construction, Agriculture, and Trade sectors had relatively lower rates of CT claims in 2008.

Distribution of Indemnity Claims by Industry Policy Year 2008

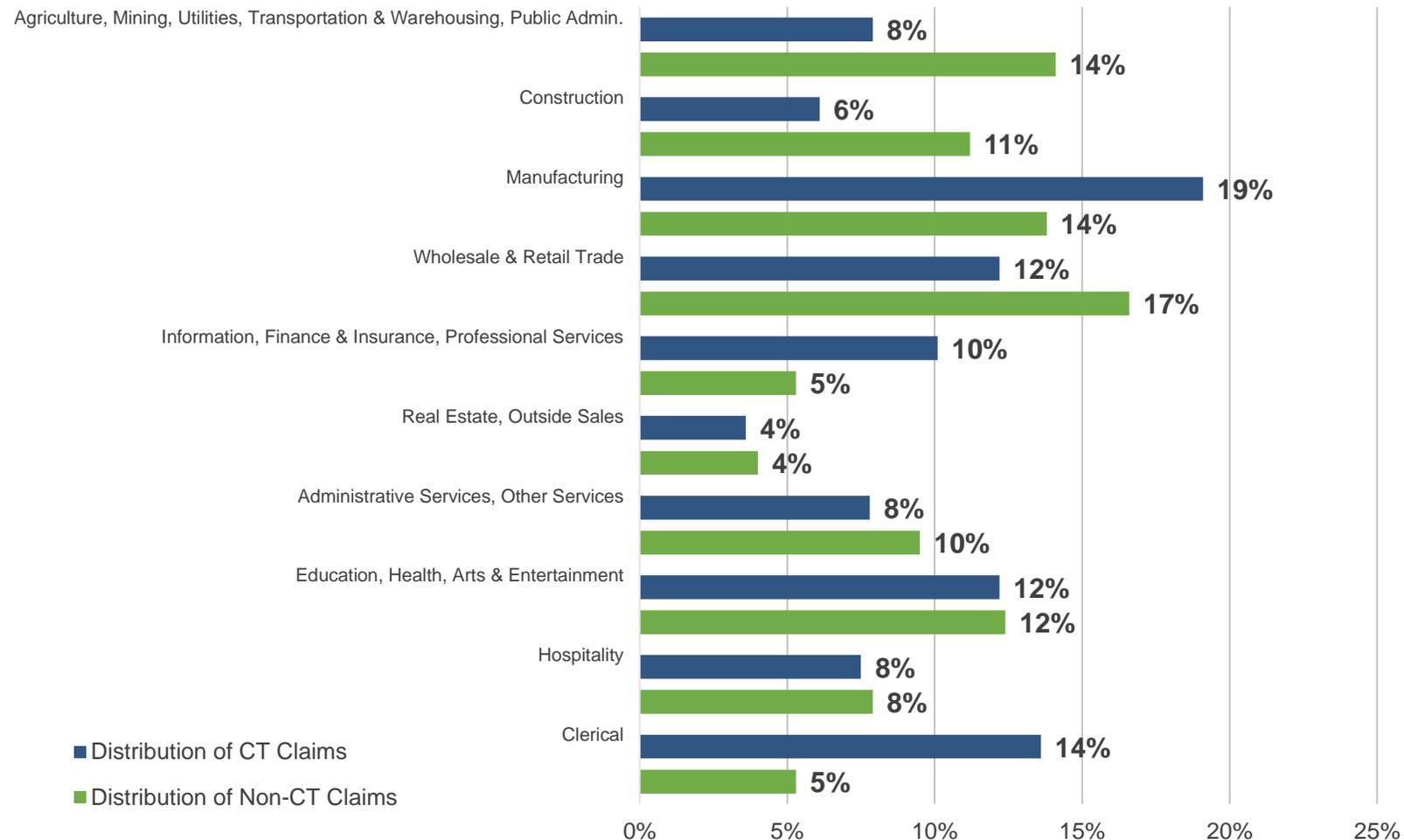




Chart 7

- Recent growth in CT claims has been concentrated in the Manufacturing and Hospitality industries.
- The proportion of CT claims from white collar industries has cut by half from 2008 to 2015.

Distribution of Indemnity Claims by Industry Policy Year 2015

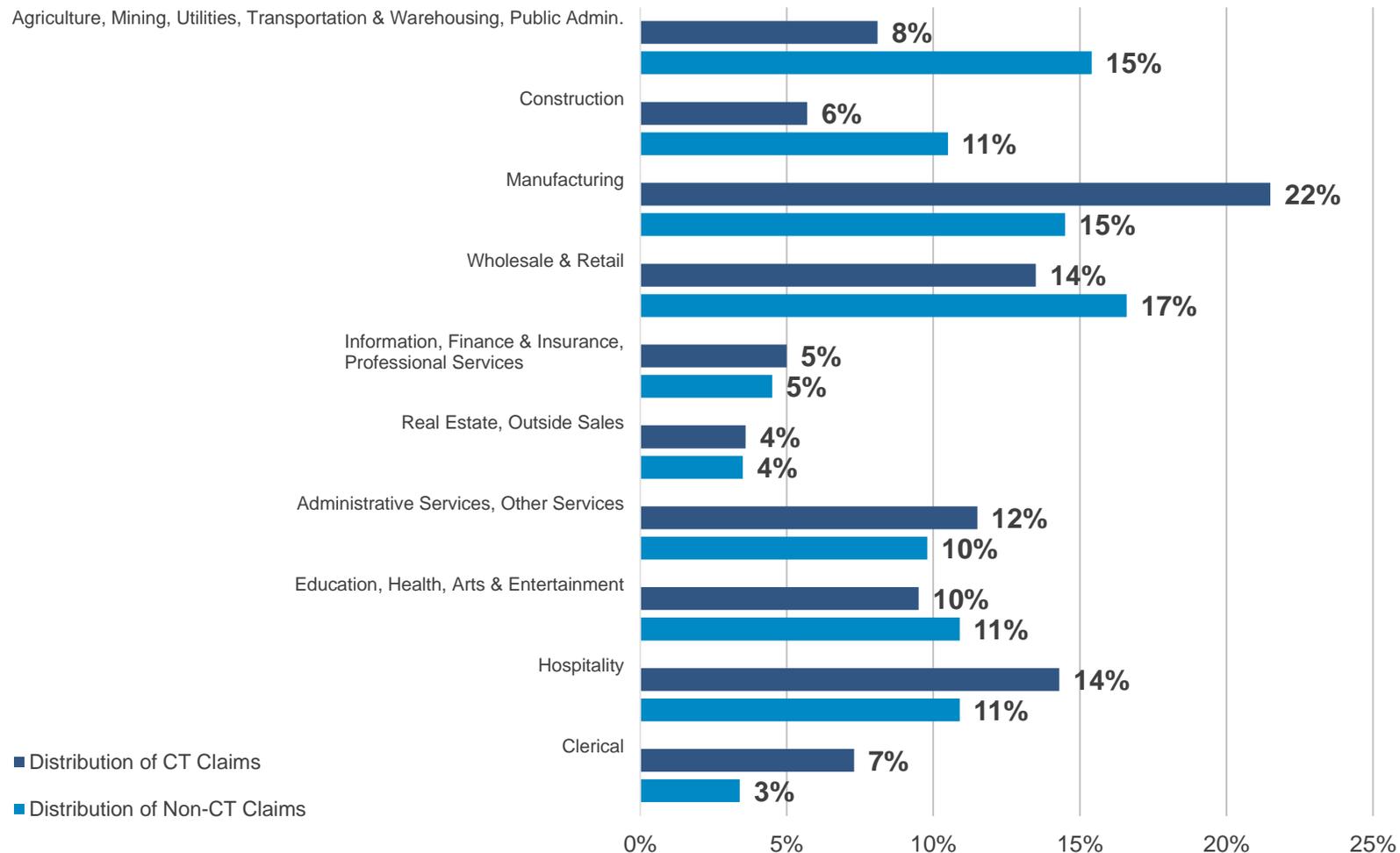




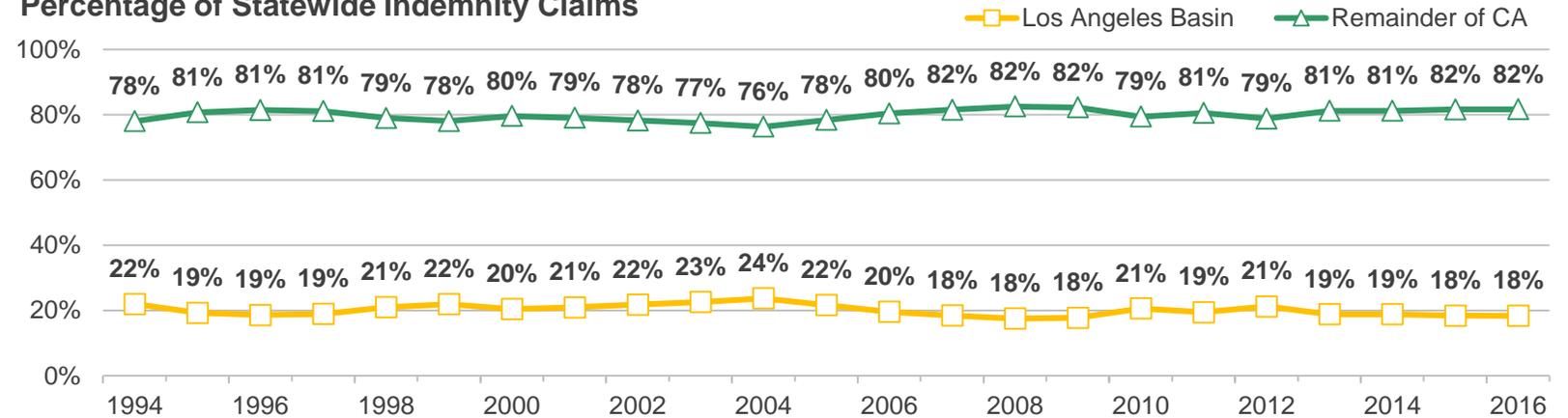
Chart 8

- CT claim rates in the Los Angeles Basin Agriculture and Mining industry have increased to historical highs in recent years, though they represent a small share of all claims.
- The Los Angeles Basin's share of total indemnity claims has declined during this same period, suggesting that some shifting from specific claims to CT claims may be occurring.

CT Claims by Industry and Region

Agriculture and Mining

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

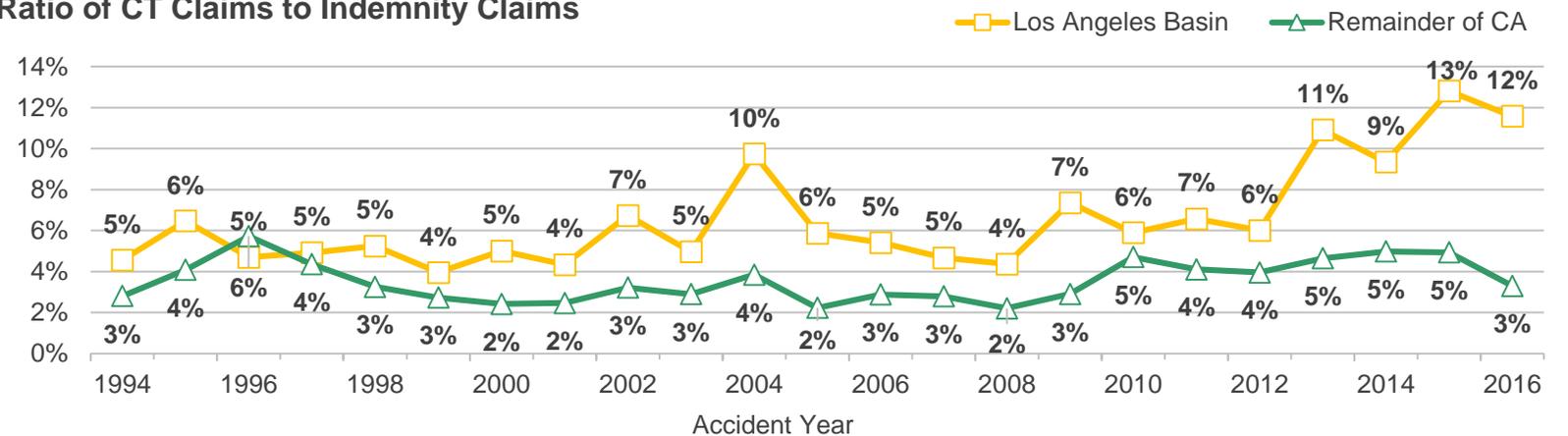


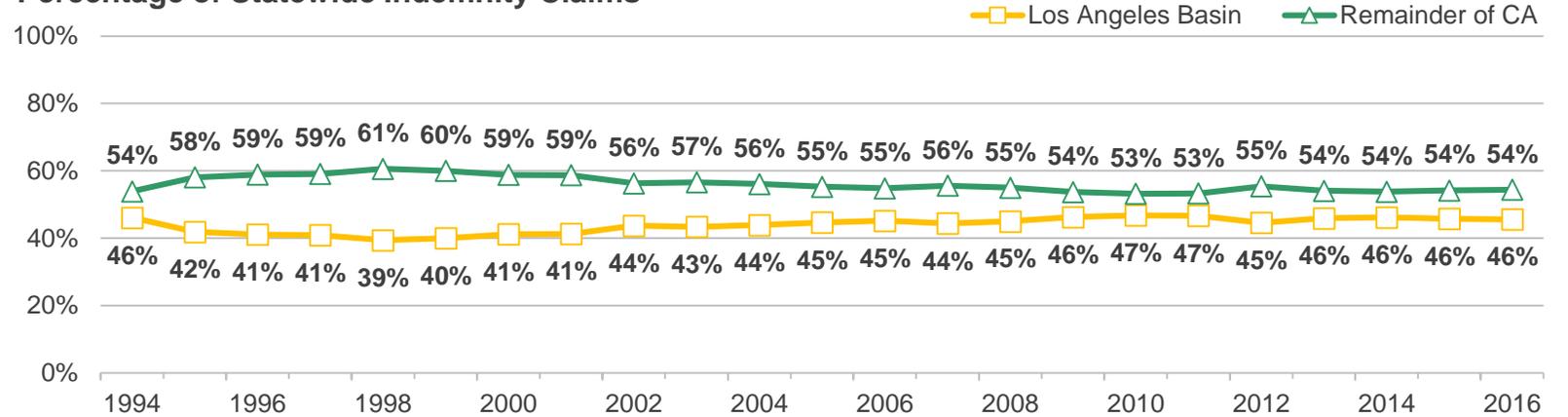


Chart 9

- Historically, CT claim rates and overall indemnity claim proportions had been very consistent in Construction across regions of California.
- Beginning in 2008, Construction CT claims increased in the Los Angeles Basin and has accelerated in recent years to be 4 times the 2007 lows.

CT Claims by Industry and Region Construction

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

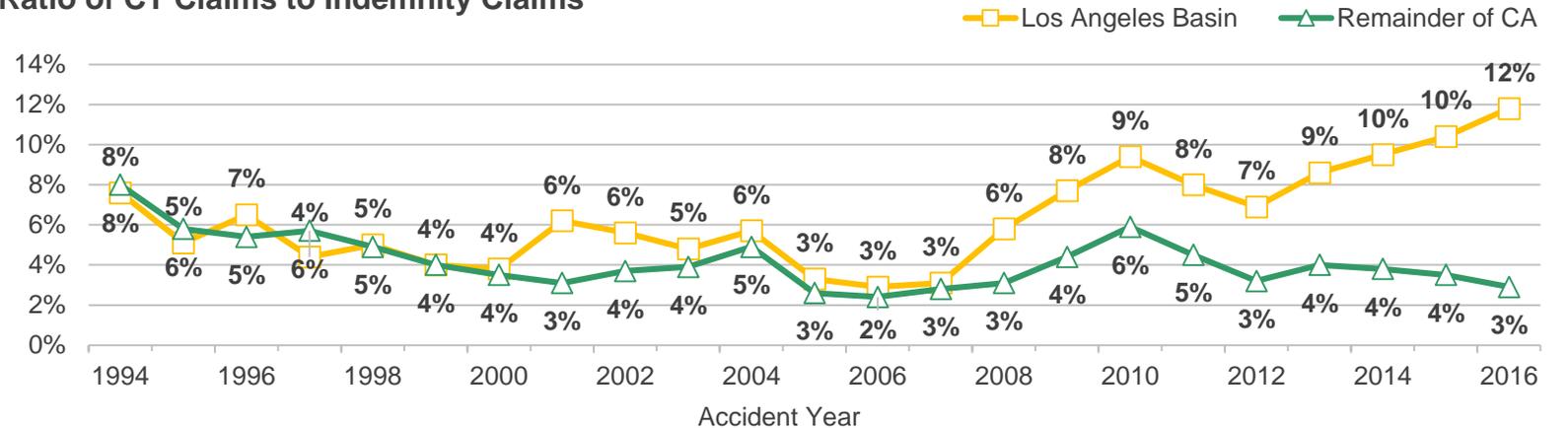




Chart 10

- Los Angeles Basin CT rates in Manufacturing diverted from the rest of the state starting in 1999 and accelerated rapidly starting in 2012.
- The Los Angeles Basin's share of all Manufacturing claims has been consistent over time, suggesting that some shifting from specific claims to CT claims may be occurring.
- The recent CT rates of over 20% in the Los Angeles Basin are among the highest of any industry and the growth in this industry is one of the most significant drivers of recent CT claim growth.

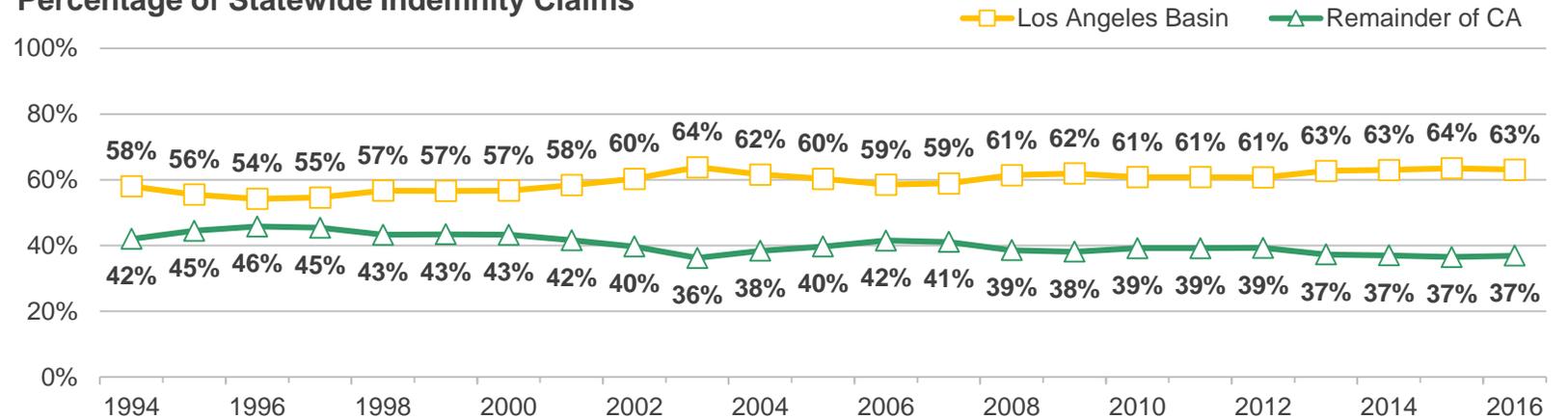
Summary of Key Findings

More Info

CT Claims by Industry and Region

Manufacturing

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

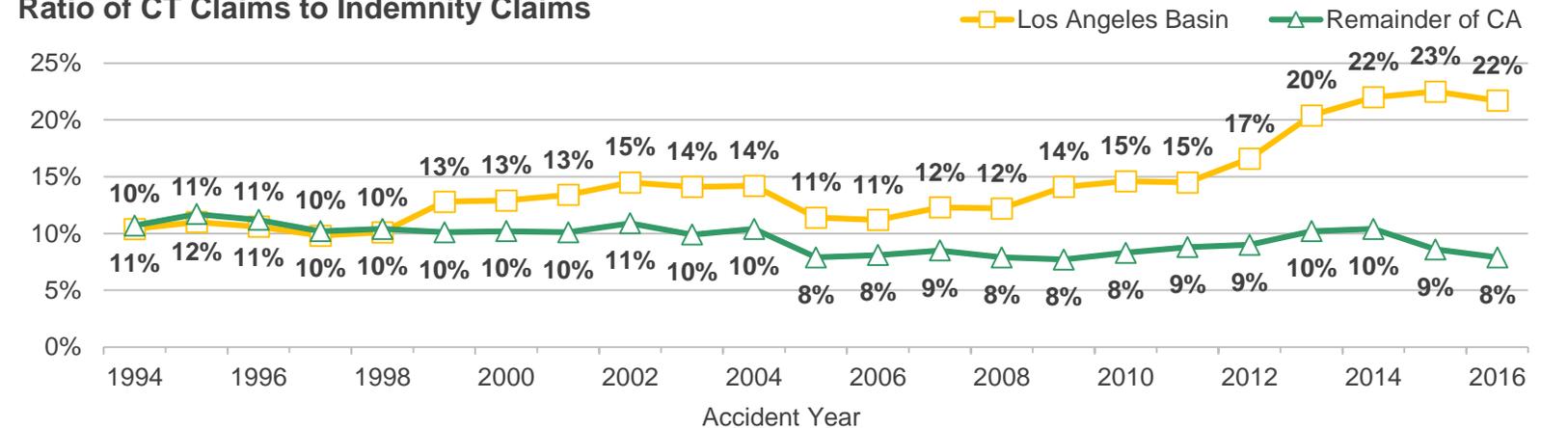




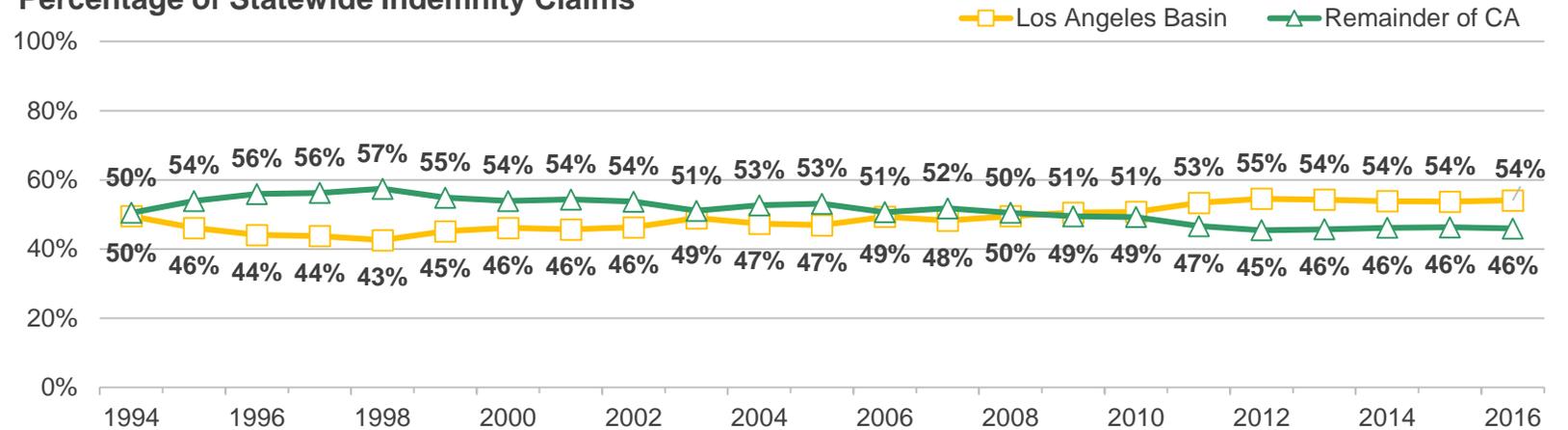
Chart 11

- The proportion of CT claims has increased in the Los Angeles Basin Trade industry in recent years though at a somewhat less significant rate than in other industries.
- The percentage of all Trade industry indemnity claims from the Los Angeles Basin has also increased which is partially attributable to the increases in CT claims.

CT Claims by Industry and Region

Wholesale and Retail Trade

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

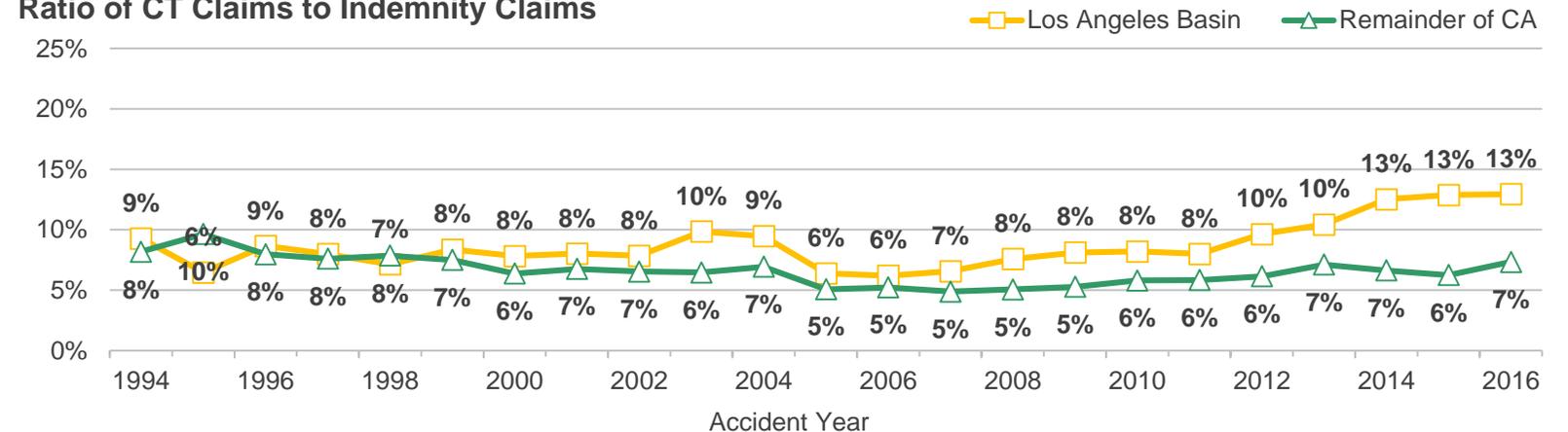




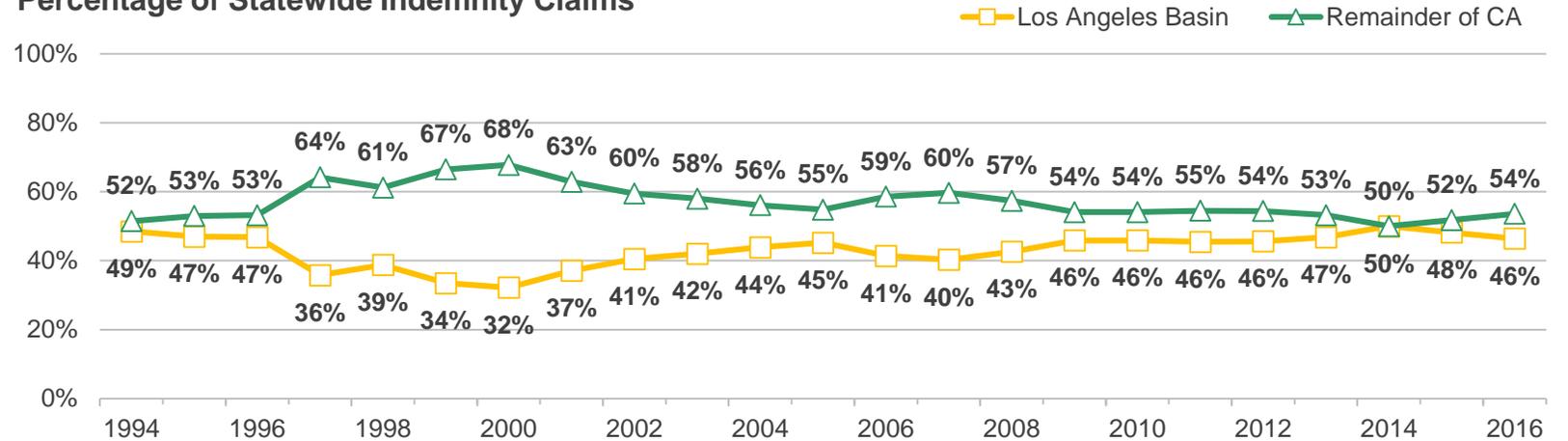
Chart 12

- CT claim rates in this industry have been relatively consistent across regions of California.

CT Claims by Industry and Region

Utilities, Transportation & Warehousing, and Public Admin

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

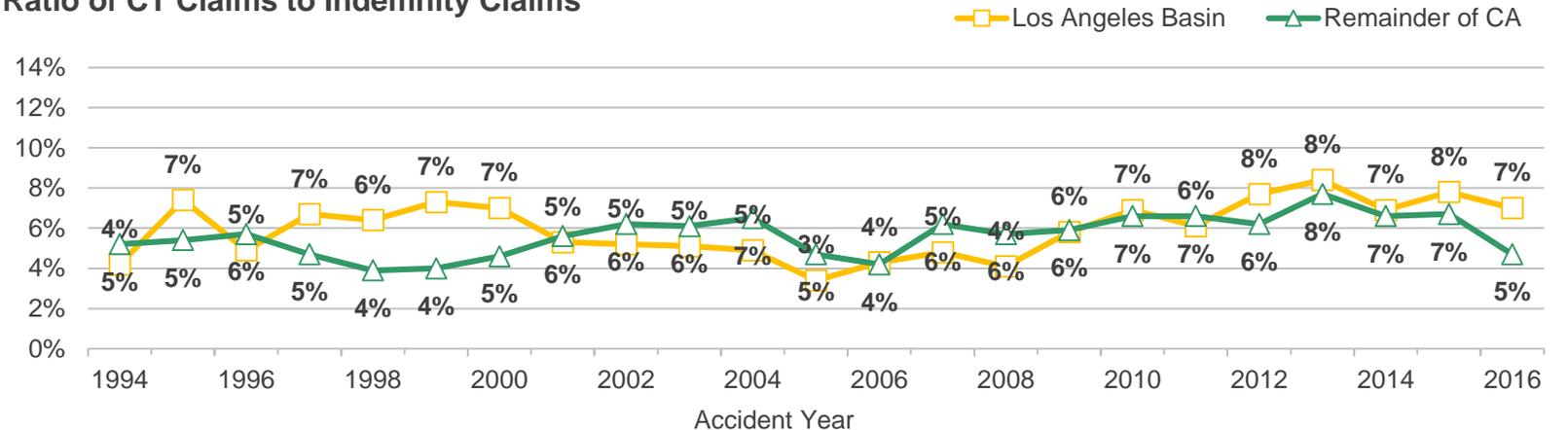


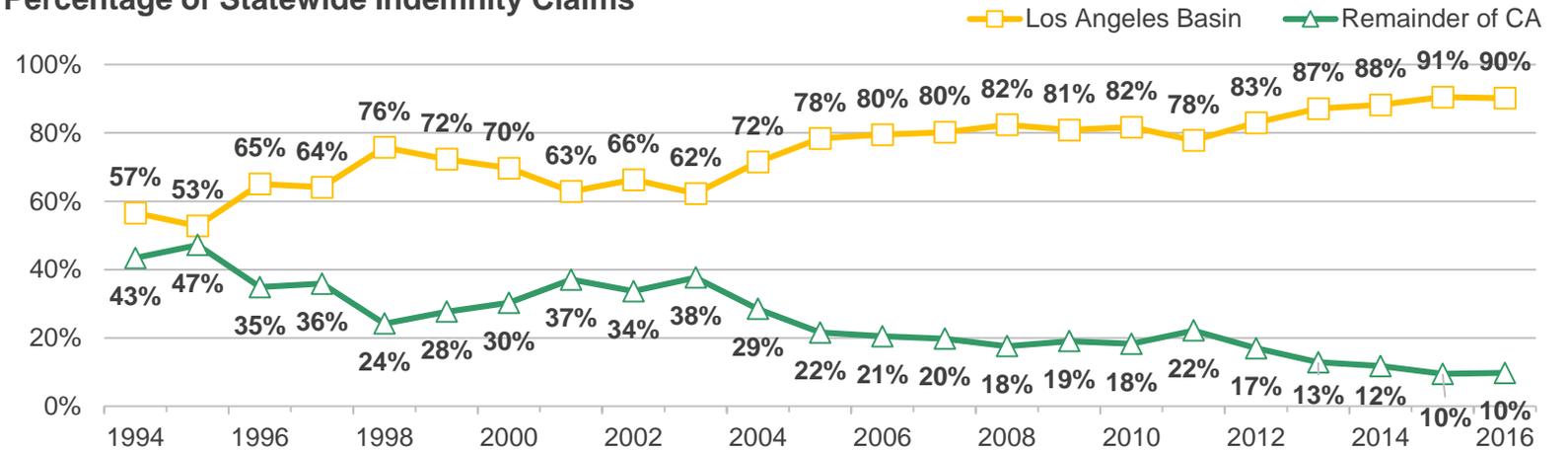


Chart 13

- The vast majority of indemnity claims in the Information industry are from the Los Angeles Basin.
- Unlike other industries, CT rates in the Information sector across California regions have cut in half from the high in 2004.

CT Claims by Industry and Region Information

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

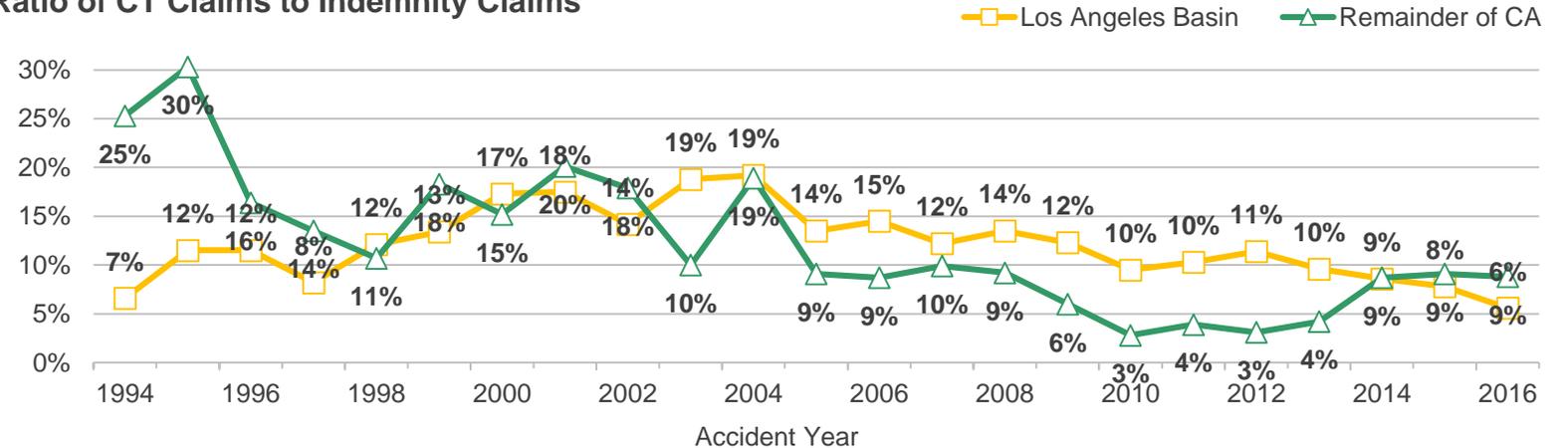




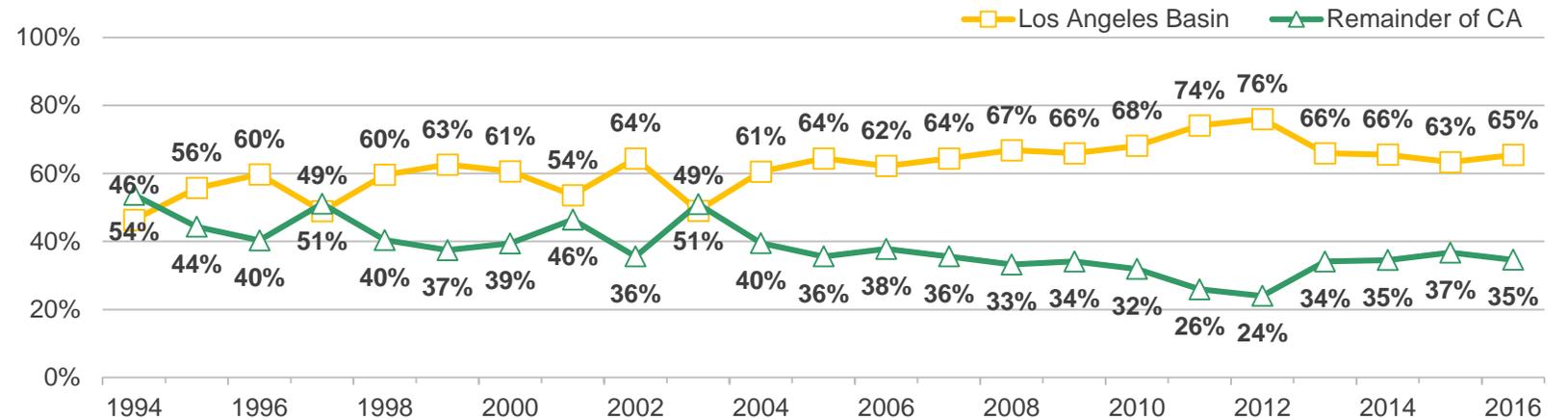
Chart 14

- The Finance & Insurance industry typically has higher CT claim proportions than any other industry.
- CT claims decreased to historical lows in the Los Angeles Basin during the 2007-2008 financial crisis and rebounded since 2010 to more typical levels for this industry.

CT Claims by Industry and Region

Finance & Insurance

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

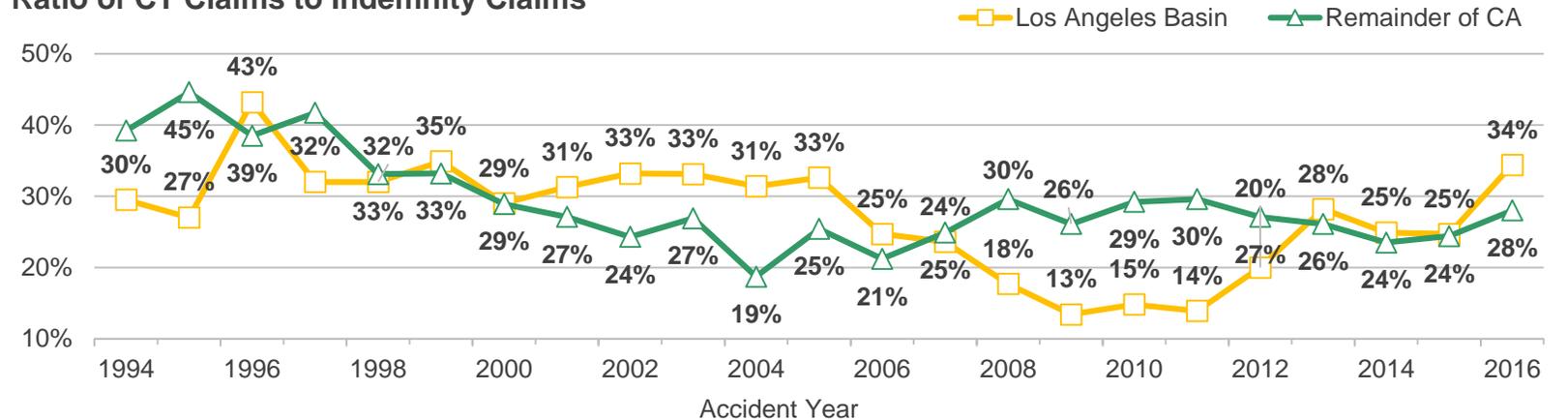


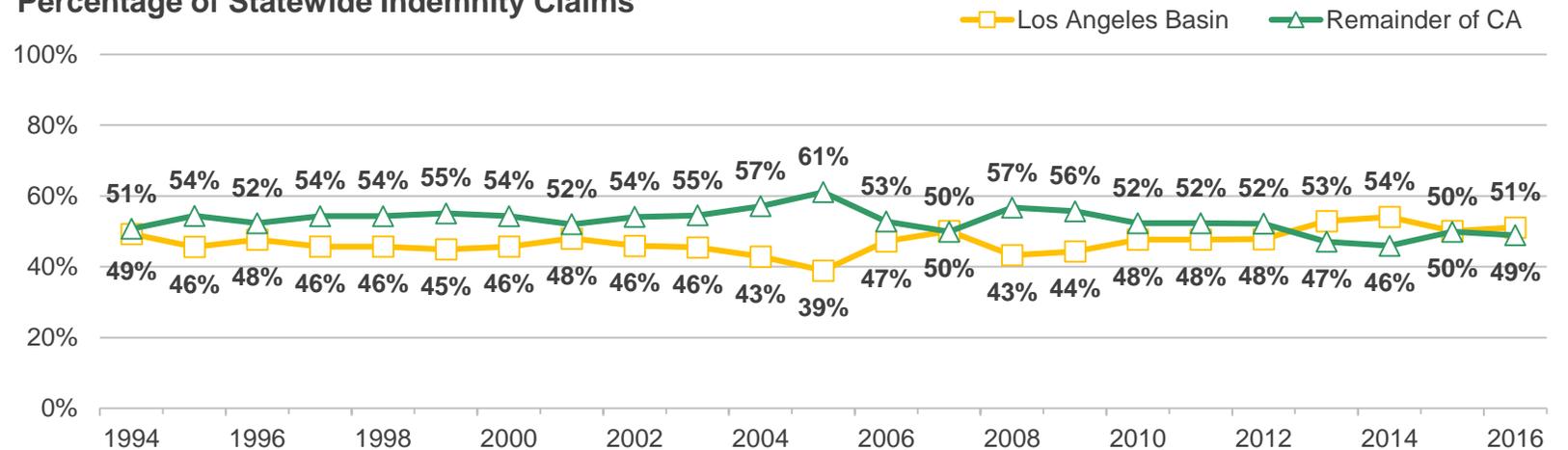


Chart 15

- CT claims have increased significantly in the Los Angeles Basin Real Estate industry and in 2016 are 4 times the 2008 level.
- CT claims in Real Estate in other regions of California have also increased, but by a less significant magnitude.
- Some of the increase across California may be related to the impact of the Great Recession and its recovery which disproportionately affected this industry.

CT Claims by Industry and Region Real Estate

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

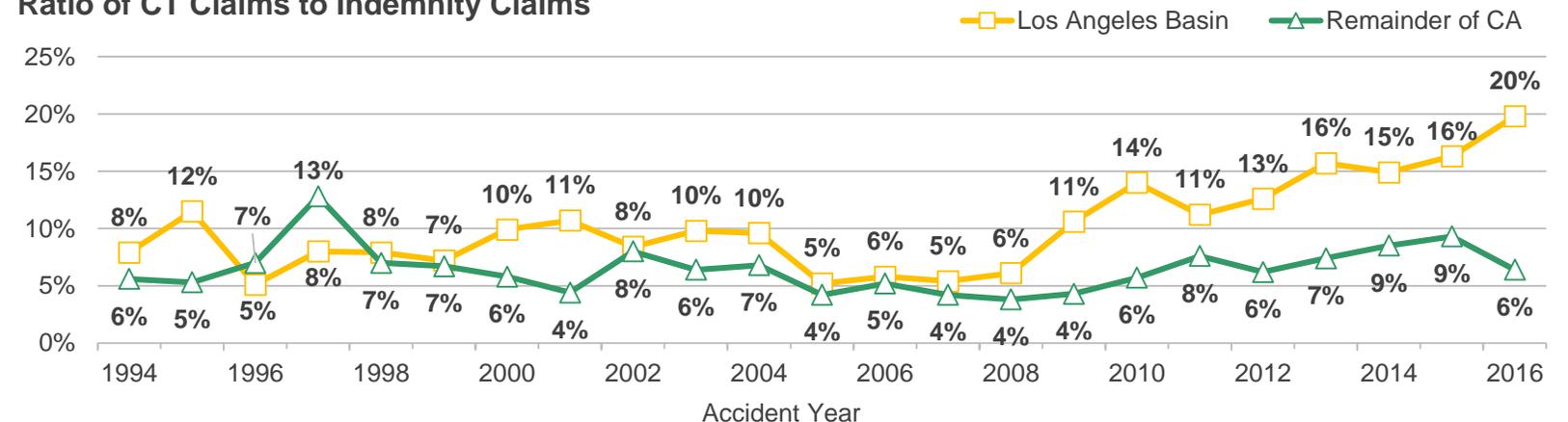




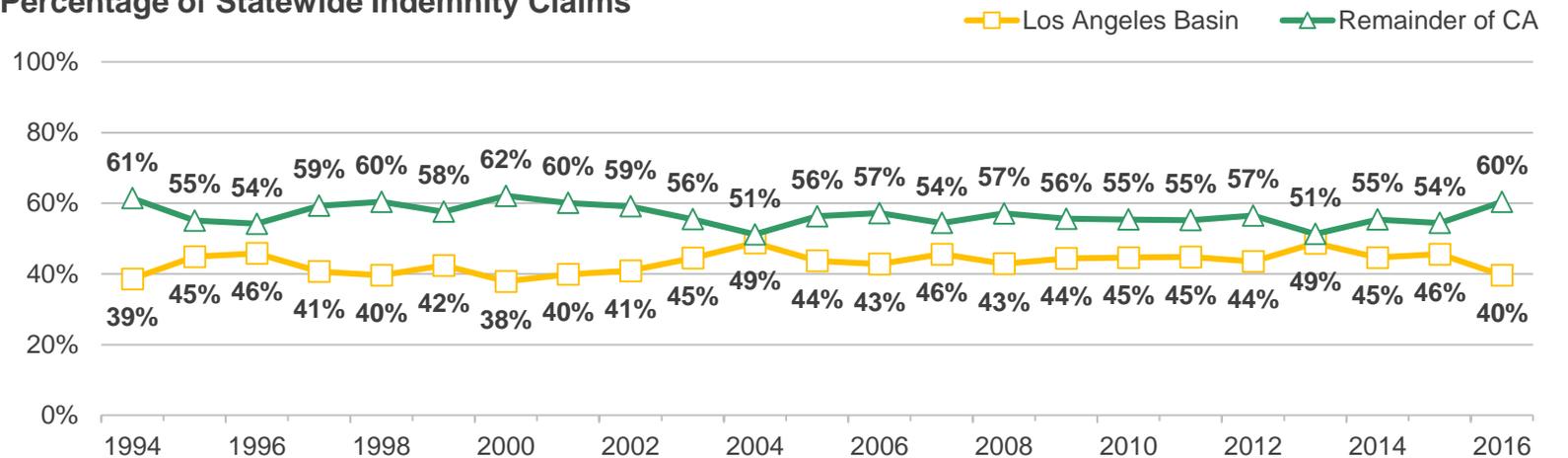
Chart 16

- Until 2015, CT claim proportions have been relatively consistent in the Los Angeles Basin Professional Services industry though they have gradually declined in other regions.
- The indicated 2016 increase for the Los Angeles Basin in this industry is preliminary and based on relatively few claims.

CT Claims by Industry and Region

Professional Services

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

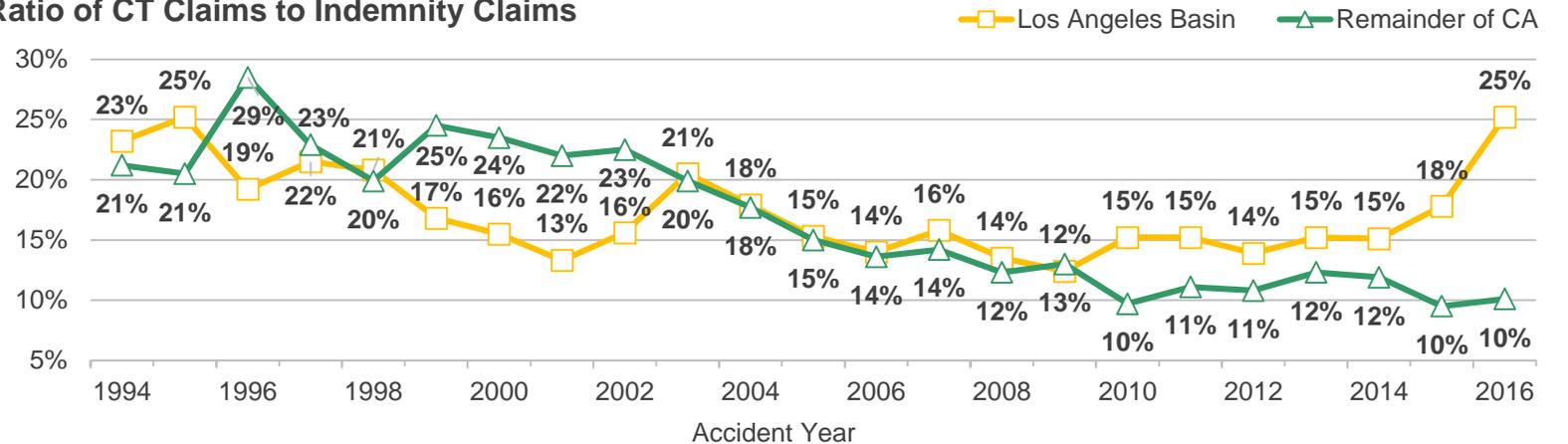


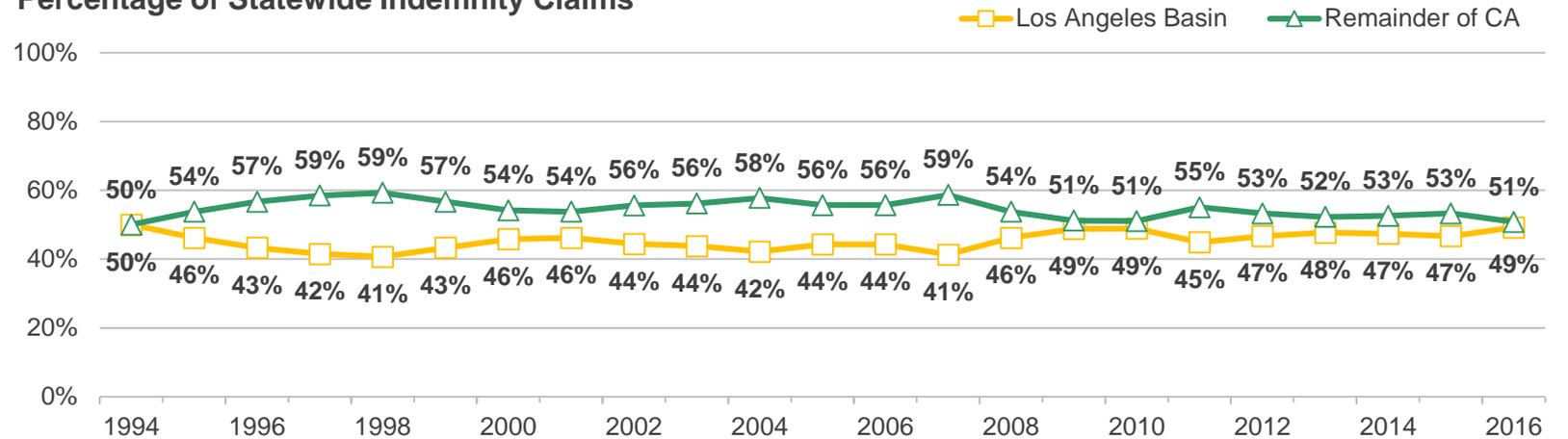


Chart 17

- The proportion of CT claims in the Administrative industry is increasing across all regions of California though at a faster pace in the Los Angeles Basin.

CT Claims by Industry and Region Administrative

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

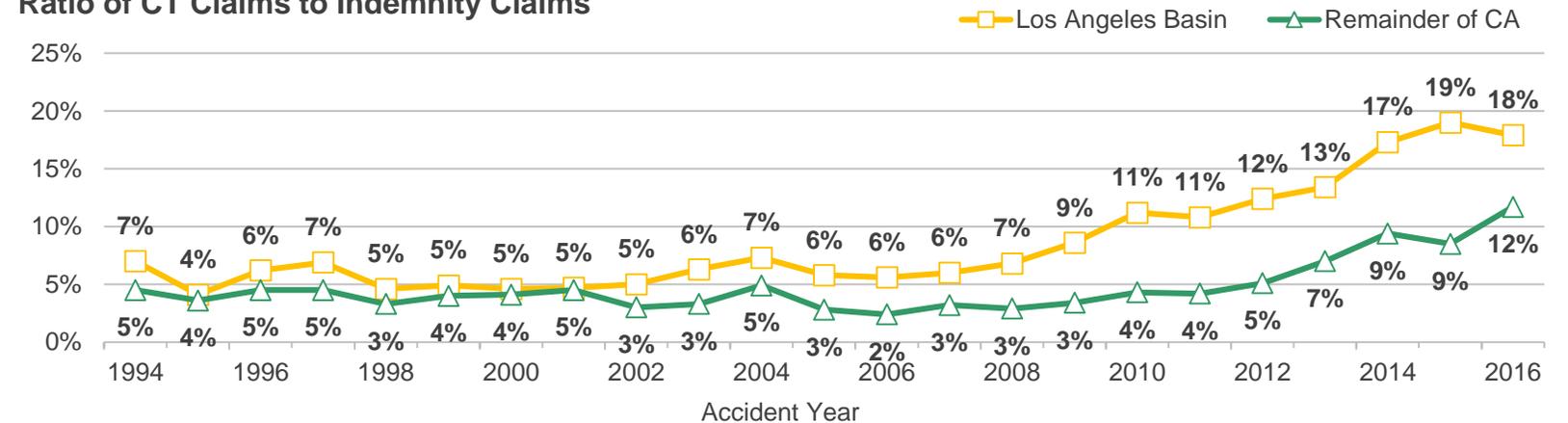




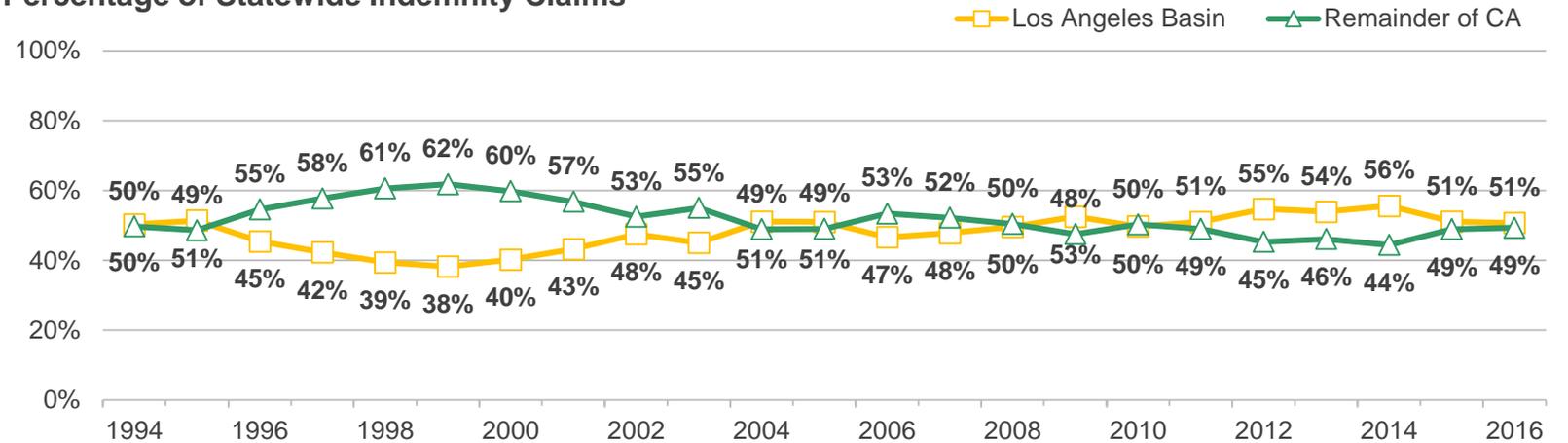
Chart 18

- Regional distributions of indemnity claim counts and the proportion of CT claims have been relatively consistent in the Education industry.

CT Claims by Industry and Region

Education

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

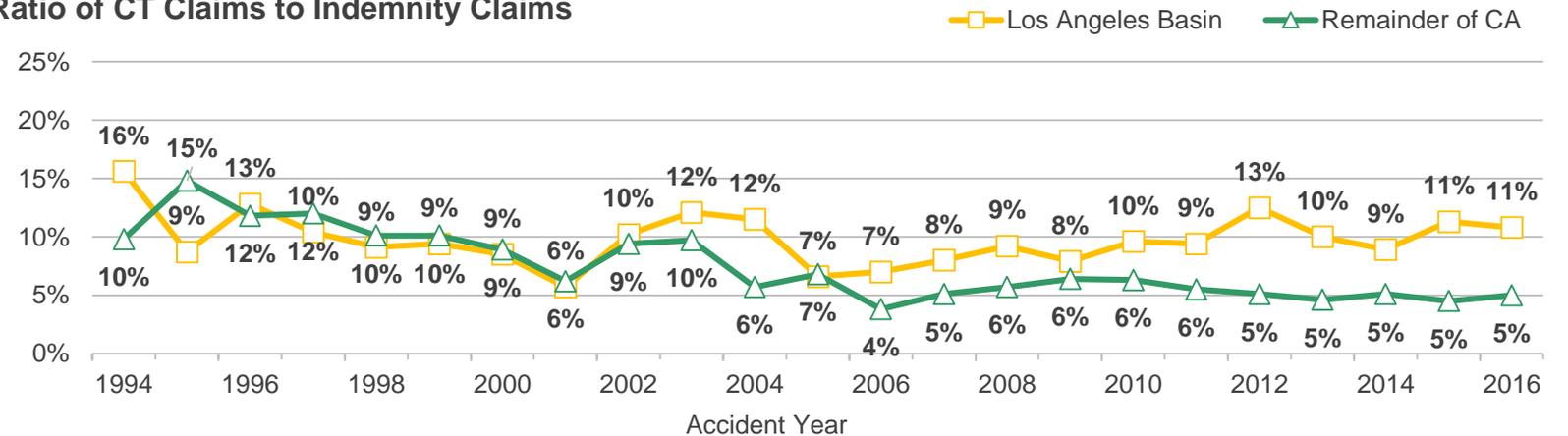




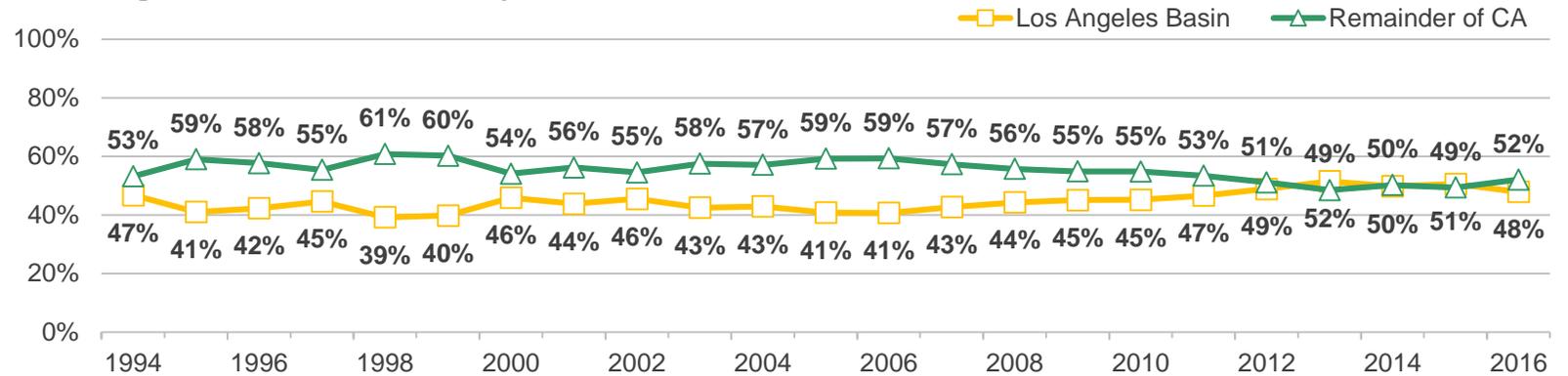
Chart 19

- The distribution of indemnity claim counts in the Health industry shifted from the majority outside of the Los Angeles Basin to becoming evenly distributed between Los Angeles and the remainder of the state.
- The proportion of CT claims in the Health industry has remained relatively stable.

CT Claims by Industry and Region

Health

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

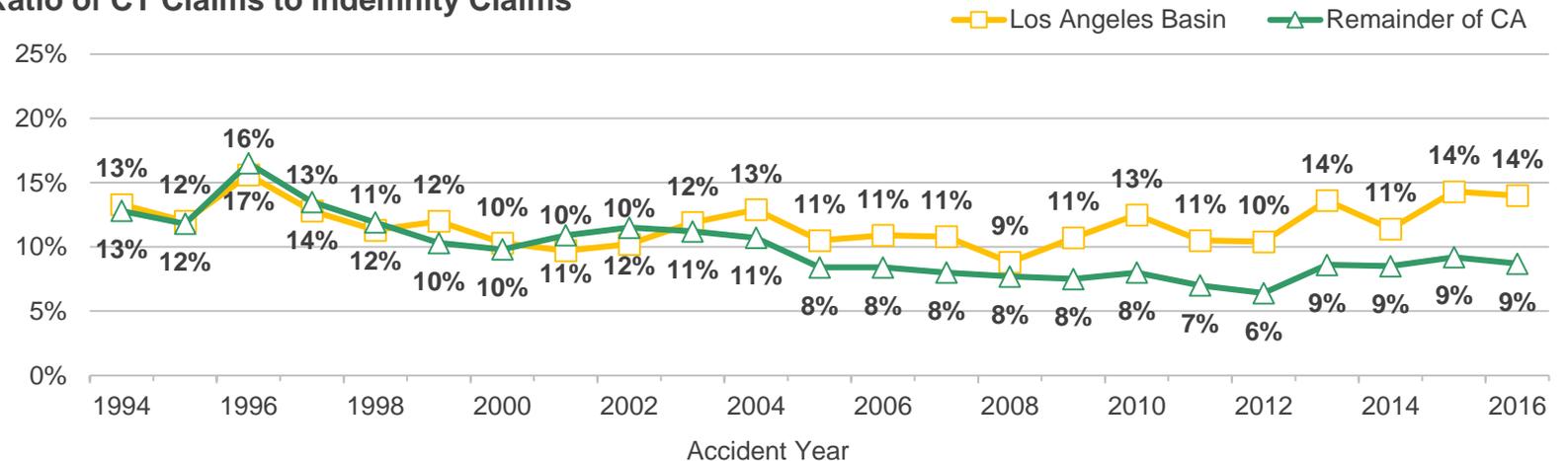




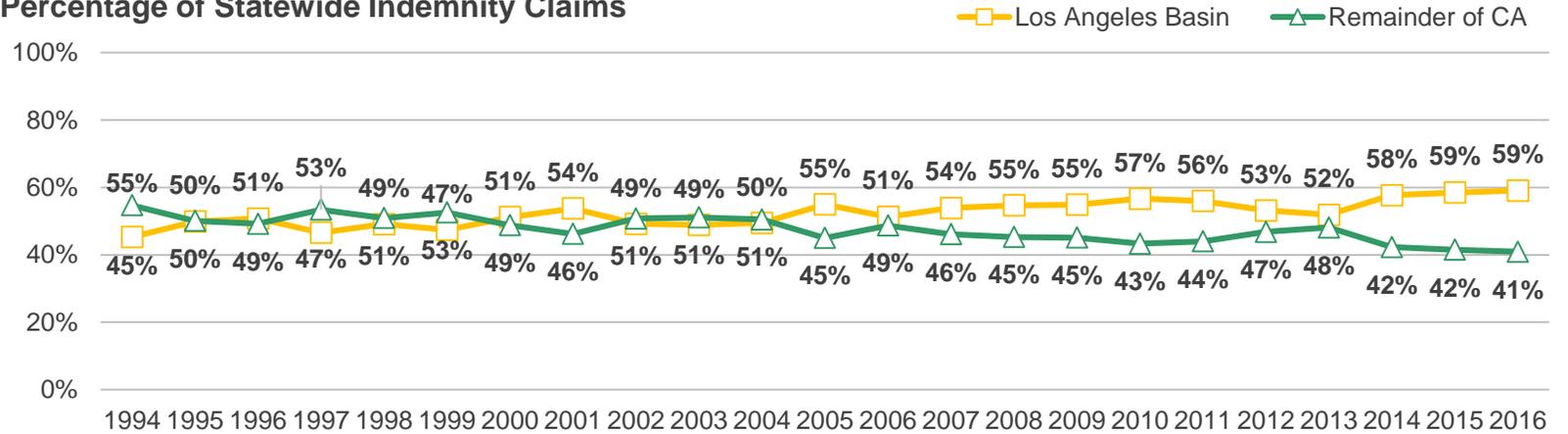
Chart 20

- The ratio of Arts & Entertainment CT claims in the Los Angeles Basin reached a historical high of 15% in 2015, but shows some indications of decline in 2016.
- The proportion of all Arts & Entertainment industry claims from the Los Angeles Basin has increased almost 10% in the last 3 years, driven in part by the CT claim growth.

CT Claims by Industry and Region

Arts & Entertainment

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

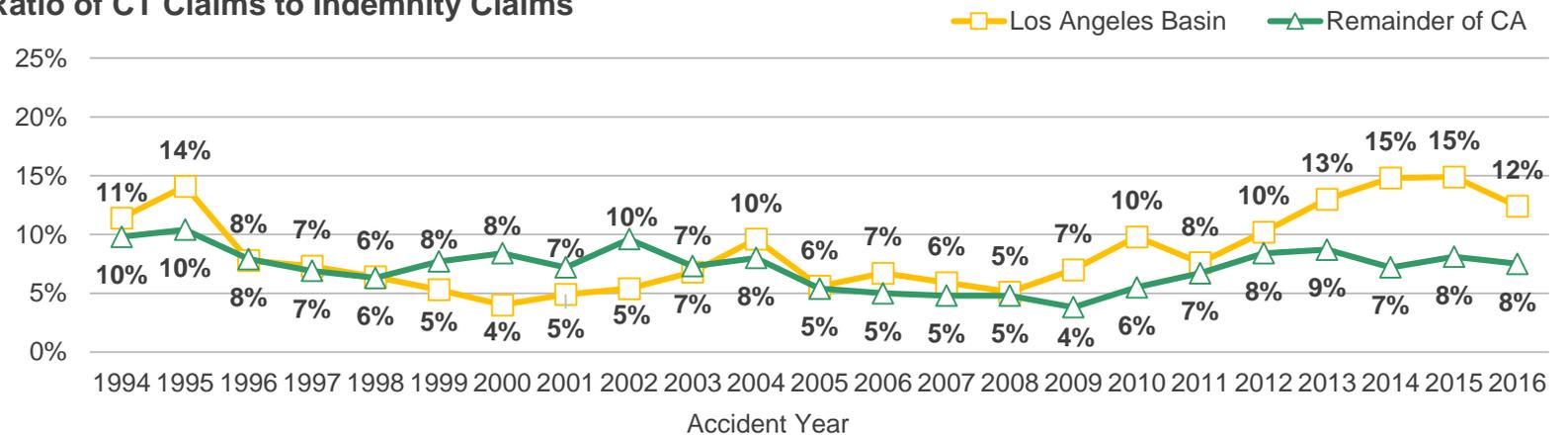




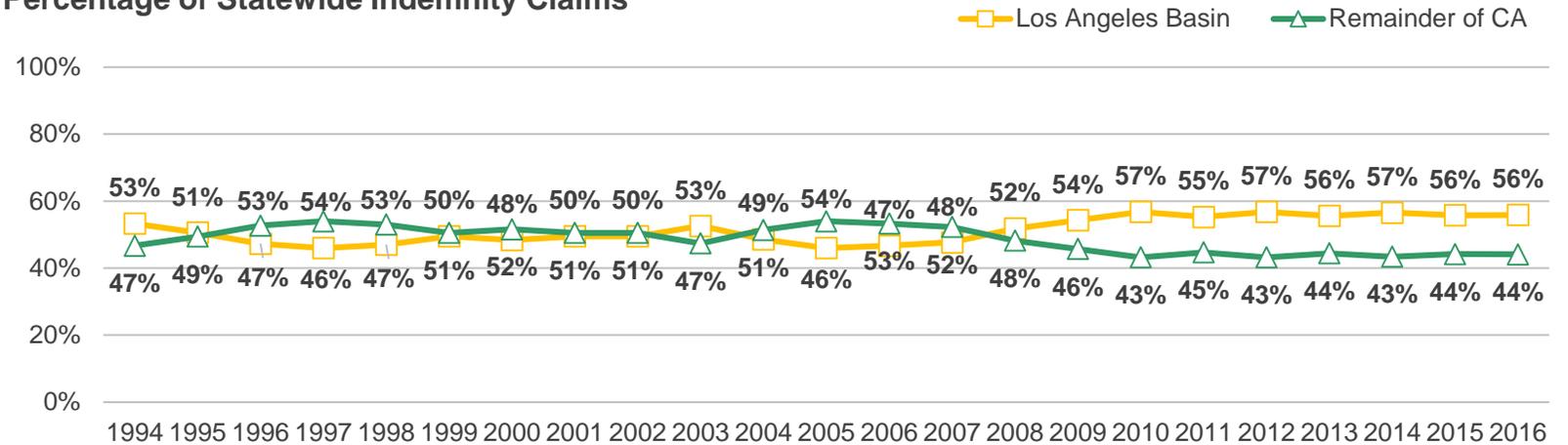
Chart 21

- Beginning in 2008, the ratio of CT claims in the Los Angeles Basin Hospitality industry increased significantly, more than doubling through 2016.
- Growth in Los Angeles Basin CT claims from this large industry is one of the most significant drivers of the overall recent growth.

CT Claims by Industry and Region

Hospitality

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

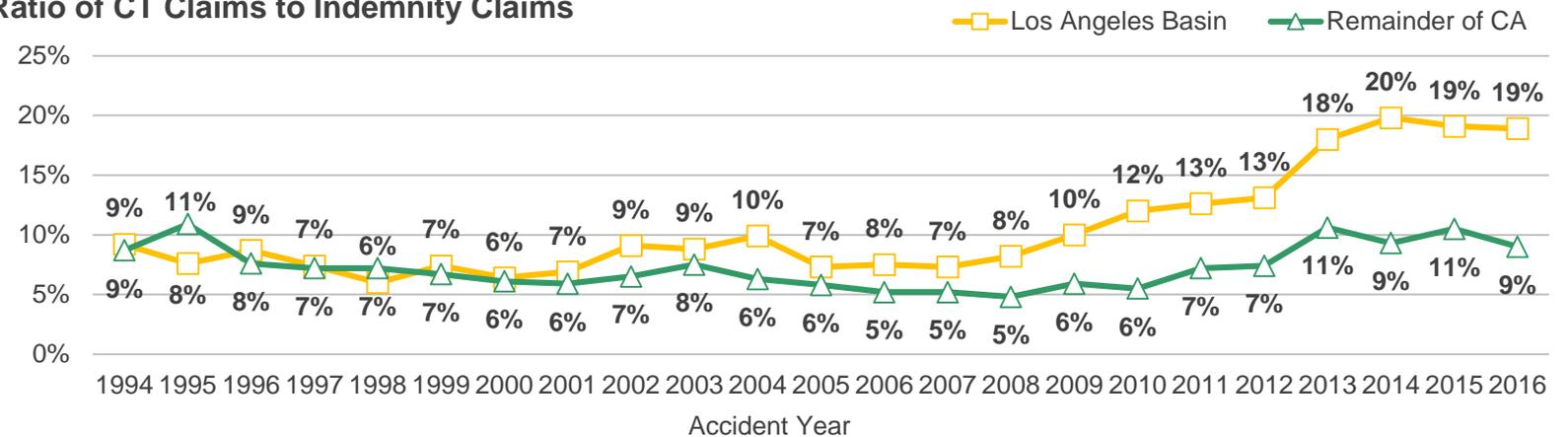




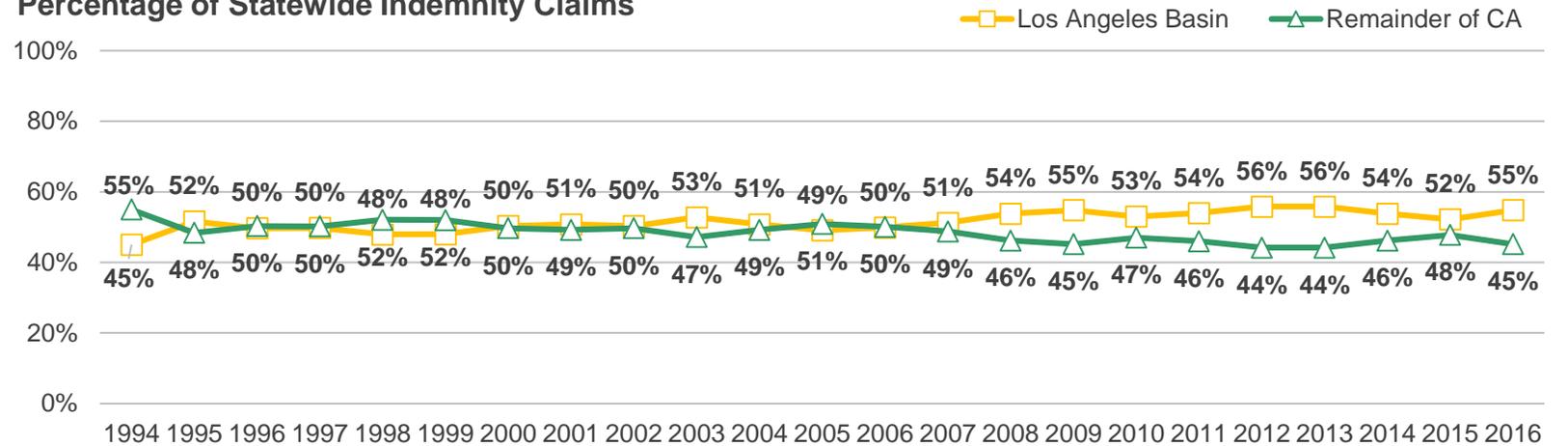
Chart 22

- The ratio of CT claims in the Los Angeles Basin Other Services industry (includes automotive repair, social services, etc.) increased by 11% since 2008 while the remainder of the state remains unchanged.

CT Claims by Industry and Region

Other Services

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

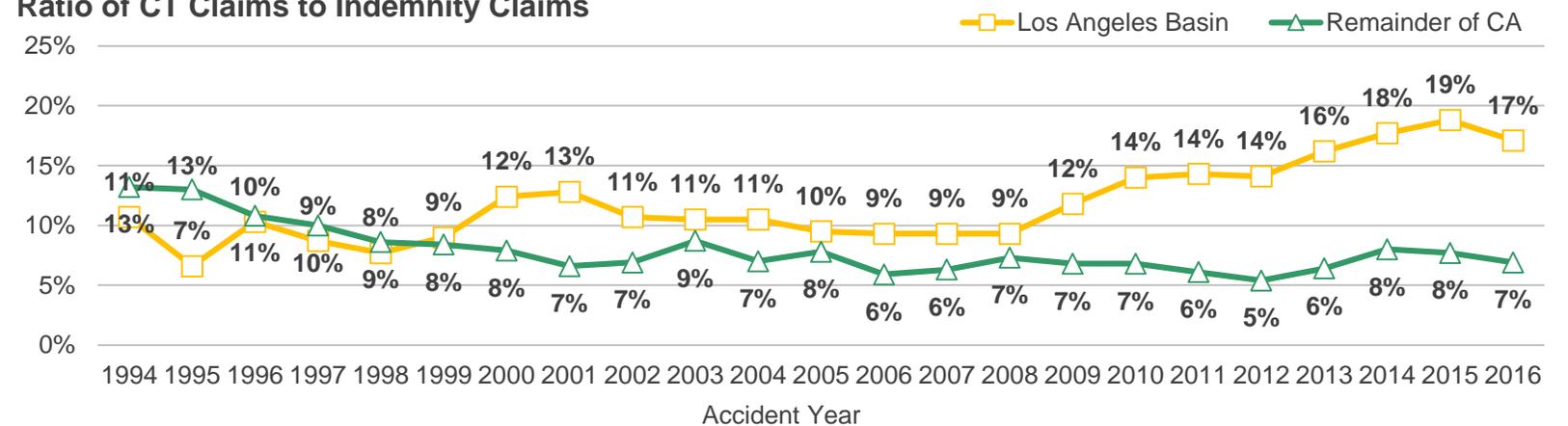




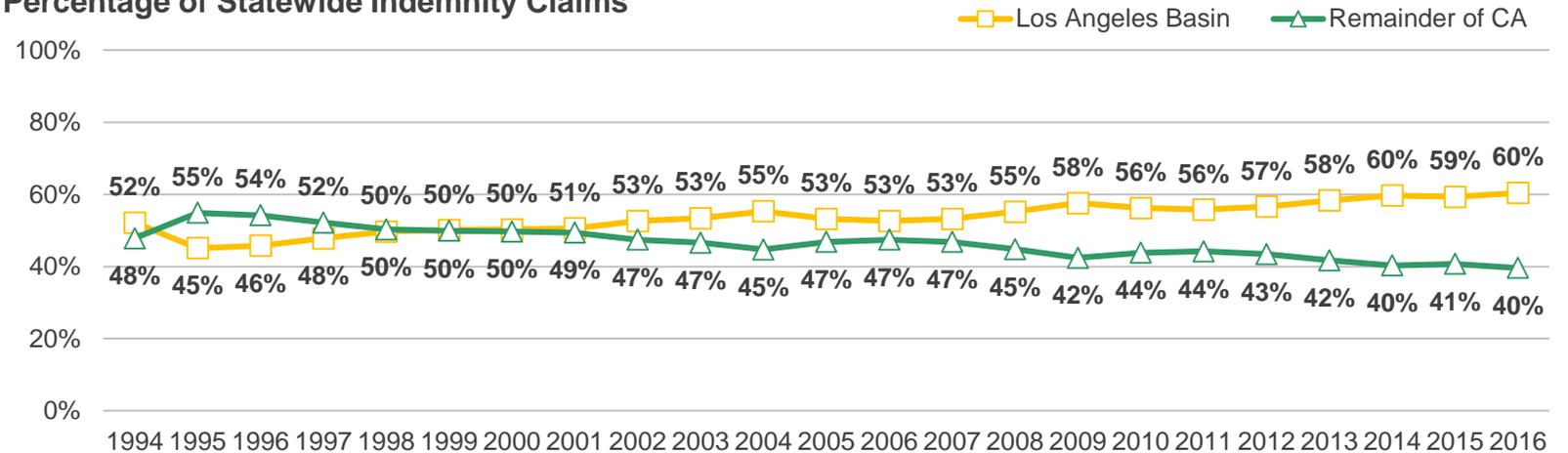
Chart 23

- CT claim ratios in the Outside Sales & Clerical industries are typically higher than other sectors as they incur more carpal tunnel claims.
- The ratio of CT claims in the Los Angeles Basin is at the highest level in the last 10 years which contrasts the remainder of the state's relatively consistent rate of CT claims.

CT Claims by Industry and Region

Outside Sales & Clerical

Percentage of Statewide Indemnity Claims



Ratio of CT Claims to Indemnity Claims

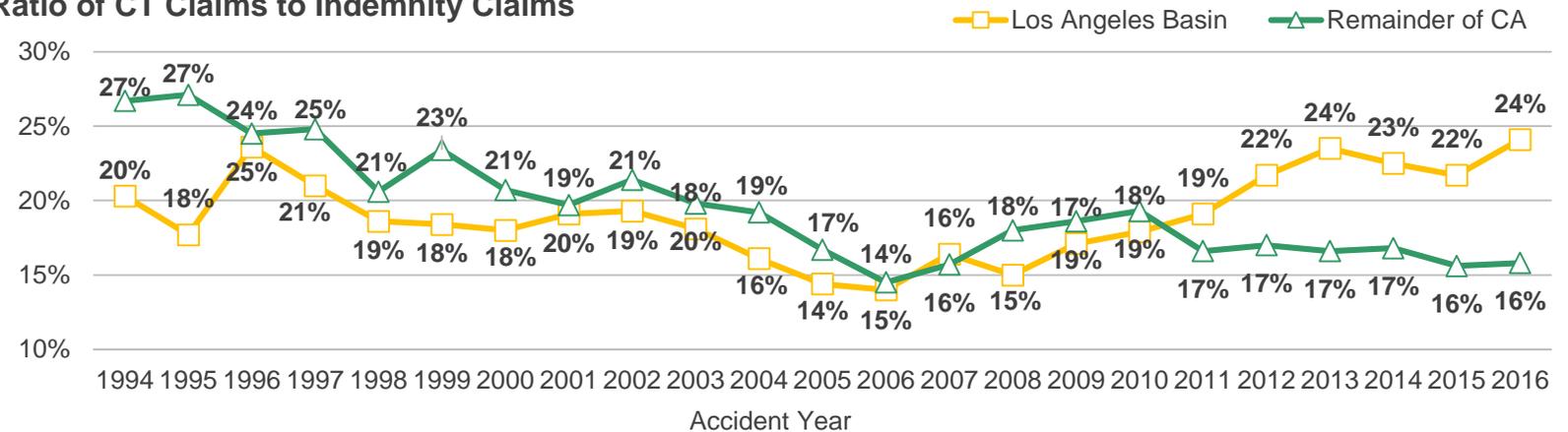




Chart 24

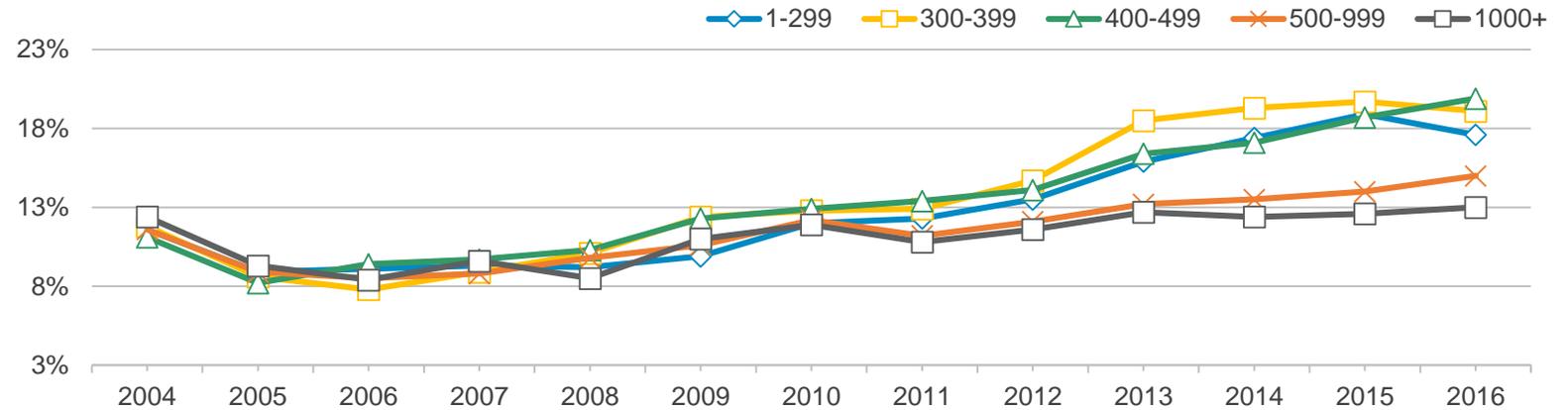
- In Los Angeles and San Diego, the ratio of CT claims has increased across all wage groups, but most significantly for claims with average weekly wages below \$500.
- The largest ratios of CT claims in other regions of California are for workers with weekly wages over \$1,000, though all wage groups are declining.
- Differences by wage level are correlated with trends by industry, as industrial mix significantly impacts the wage distribution.

Summary
of Key Findings

More Info

Percent of CT Claims by Average Weekly Wage

Ratio of CT Claims to Indemnity Claims - Los Angeles and San Diego



Ratio of CT Claims to Indemnity Claims - Remainder of California

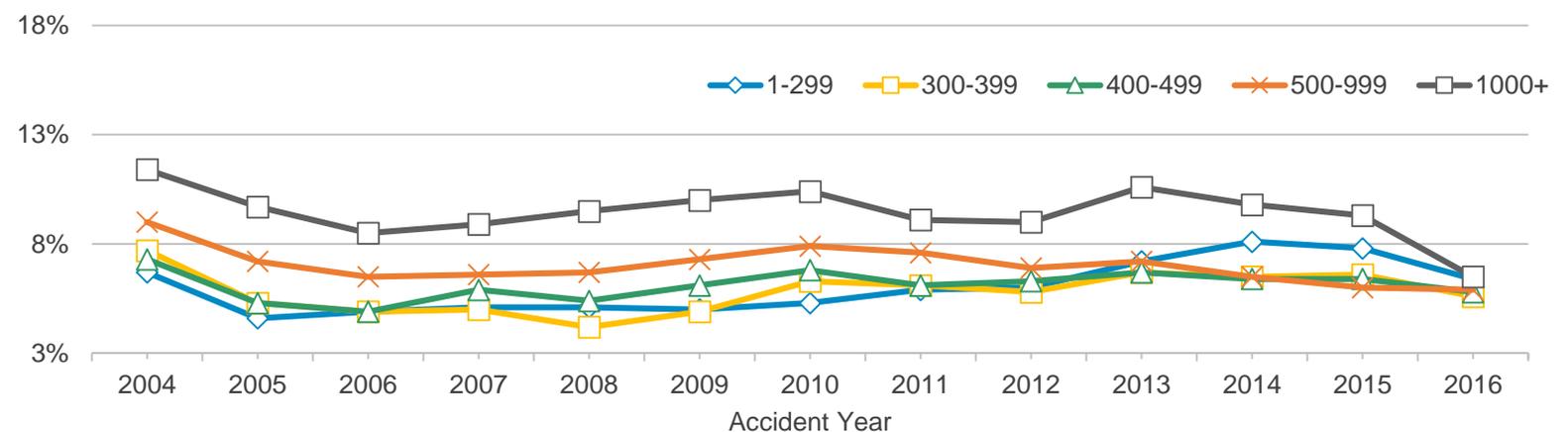


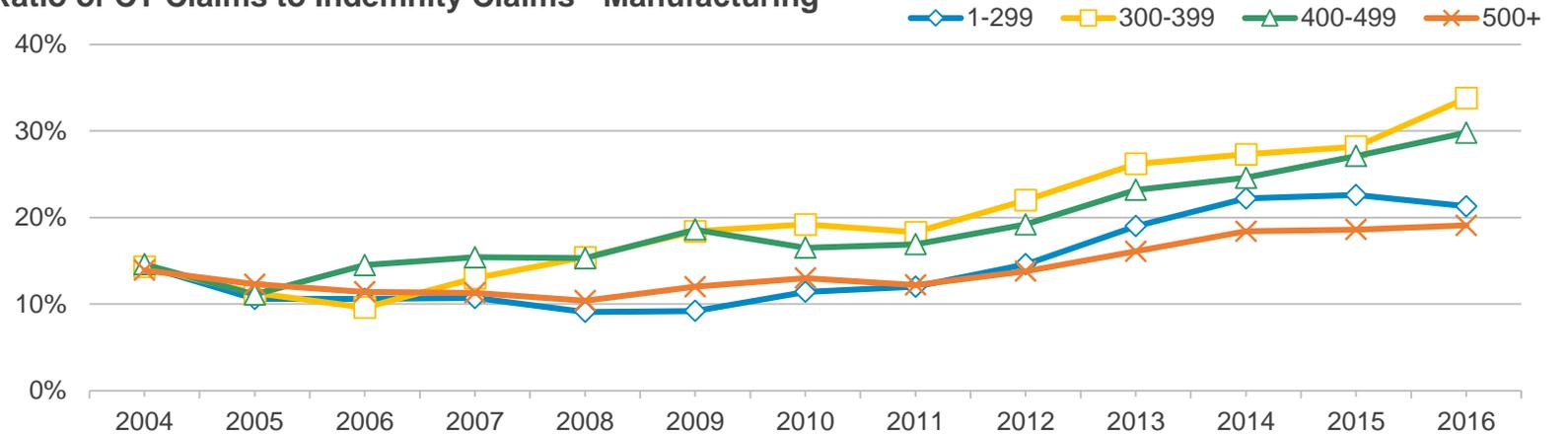


Chart 25

- In Manufacturing, there has been recent growth in CT claim ratios across all wage levels, though rates for weekly wages between \$300 and \$500 have continued to increase in recent years while the low and high wage intervals have leveled off.
- In Hospitality, the ratio of CT claims at all wage levels has increased.

Percent of CT Claims by Industry and Average Weekly Wage

Ratio of CT Claims to Indemnity Claims - Manufacturing



Ratio of CT Claims to Indemnity Claims - Hospitality

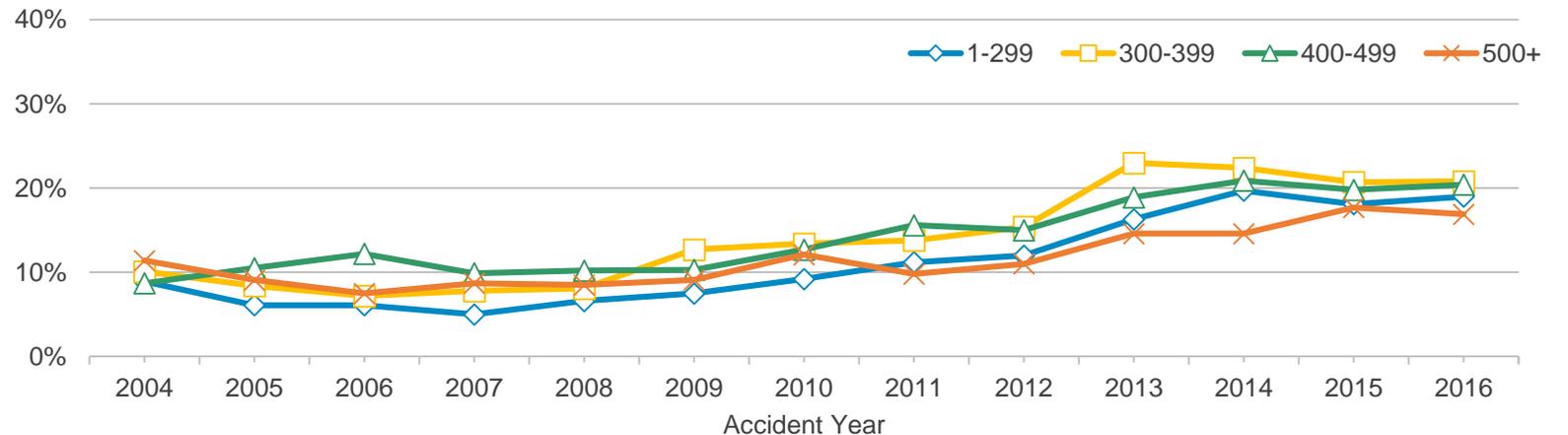


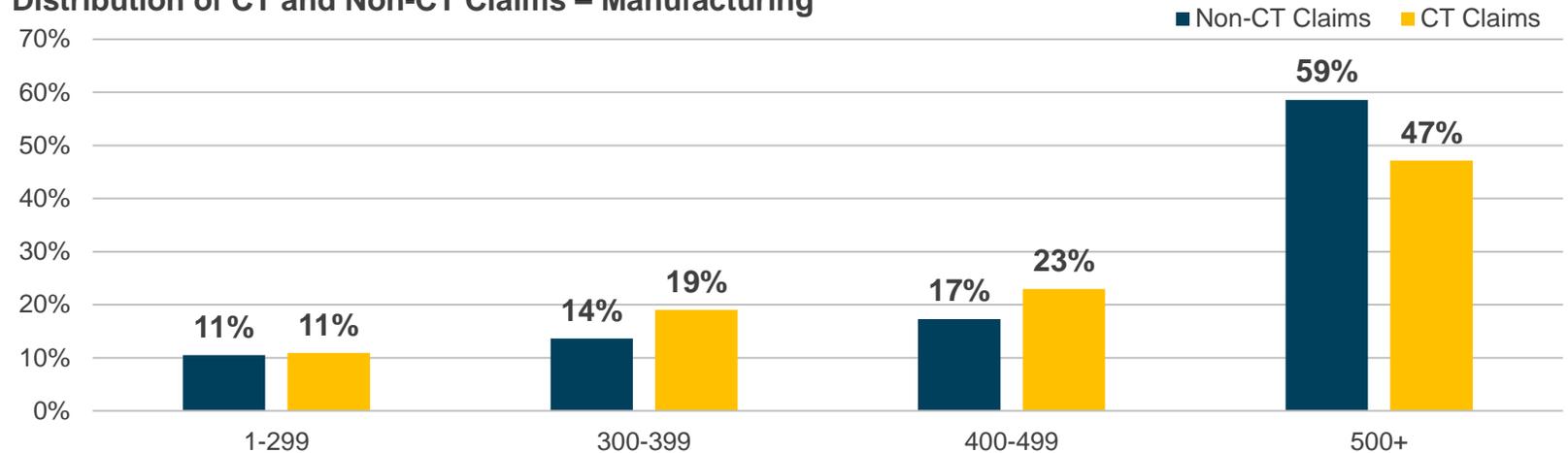


Chart 26

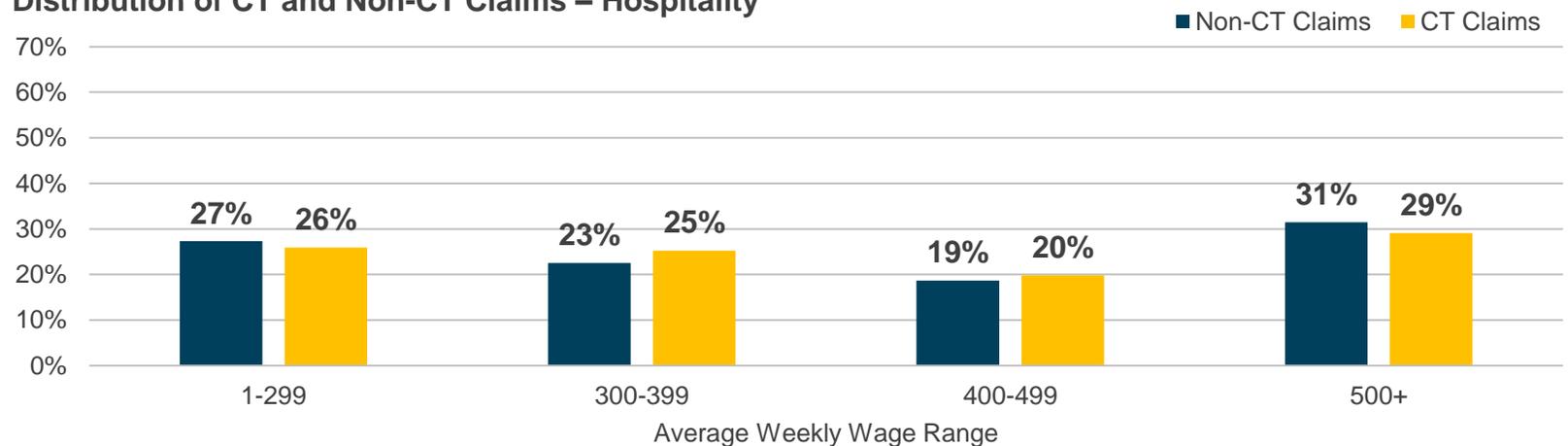
- In Manufacturing, the majority of CT and specific injury claims are for workers making over \$500 per week.
- In the Hospitality industry, a much larger proportion of claims are from lower wage workers. In particular, 70% of CT claims in this industry make below \$500 per week.
- The information on these last two charts suggests that there is both growth in lower wage CT claims as well as in lower wage industries in general in the Los Angeles and San Diego regions.

Distribution of Indemnity Claims in Los Angeles and San Diego by Wage Level and Industry

Distribution of CT and Non-CT Claims – Manufacturing



Distribution of CT and Non-CT Claims – Hospitality



More Info



Area 3: Claim Characteristics from Detailed Survey Data

Since 2012, the WCIRB has conducted several surveys of CT claims to better understand the detailed characteristics of these claims. These surveys have found that CT claims are significantly more likely than other indemnity claims to be represented, filed post-termination of the employee, and initially denied. CT claims have also been found to be significantly more complex than other claims and much more likely involving multiple claims filed by the same claimant, multiple body parts alleged, psychiatric or mental stress components alleged, and interpreter services.

This area also considers some of the more complex claims identified from our earlier survey data and how they have developed over time. Post-termination and represented CT claims have developed much more significantly than other CT claims even though they initially have lower payments. CT claims with multiple body parts alleged and only some body parts accepted are the most costly of CT claims and tend to stay open the longest.





Chart 27

- Over 70% of CT claims are initially denied in whole or part. This is almost 3 times more than denial rates for specific injury claims.
- Almost half of CT claims are filed post-termination compared to less than 10% for specific injury claims.
- Rates of representation for CT claims have trended upward with over 90% of recent claims represented.
- 95% of post-termination claims are represented and denied, while 85% of post-termination and denied claims are from the Los Angeles Basin area.
- About one-quarter of CT claims include an associated claim filed by the same claimant for a specific injury.

Summary
of Key Findings

More Info

Characteristics of Surveyed CT Claims

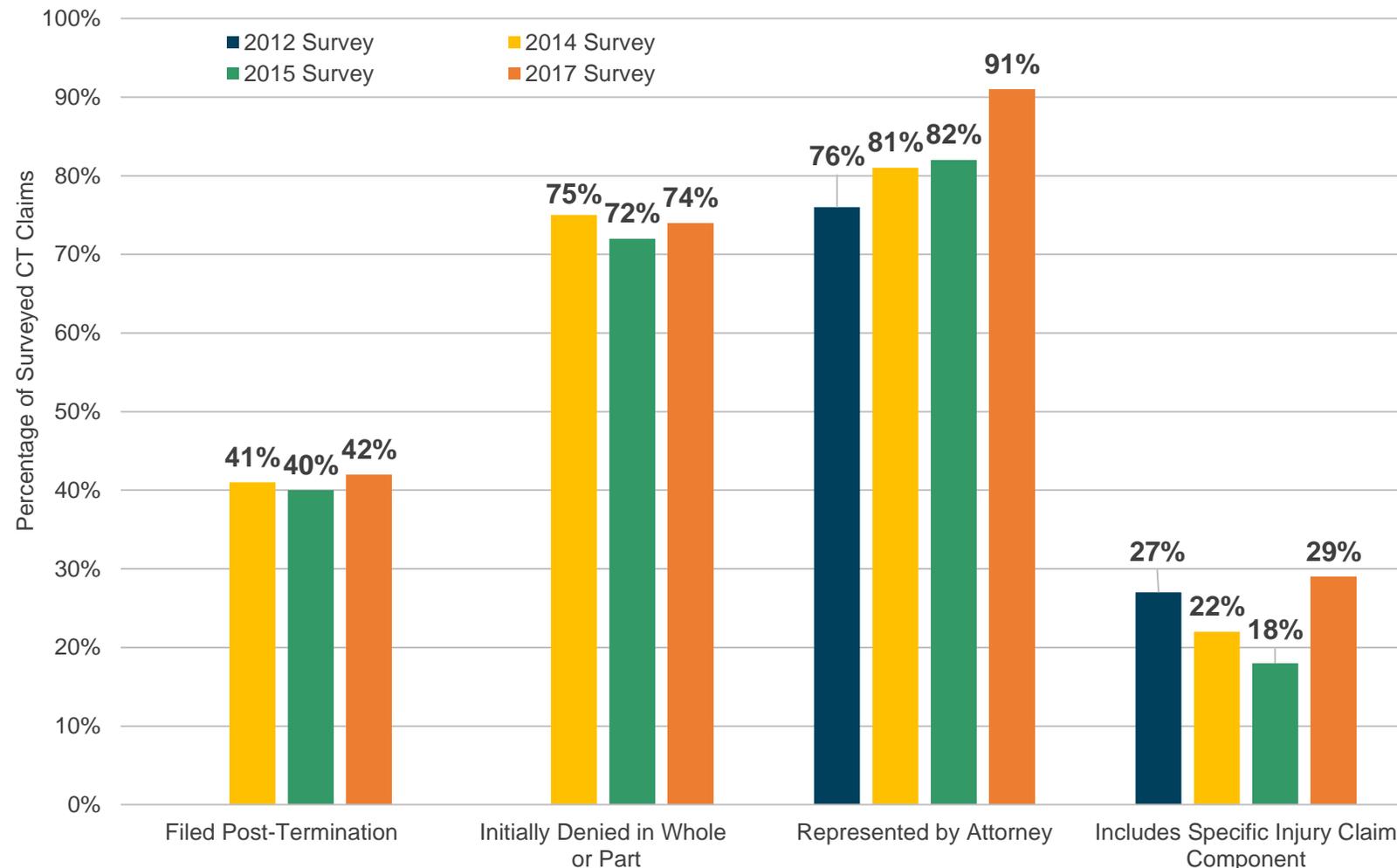




Chart 28

- Post-termination CT claims cost less than other CT claims and close faster, likely related to the high denial rates on these claims.
- Losses on post-termination claims develop slower than other CT claims as they cost significantly less earlier on.

Post-Survey CT Claim Development Post-Termination Claims for Accident Years 2012-2014

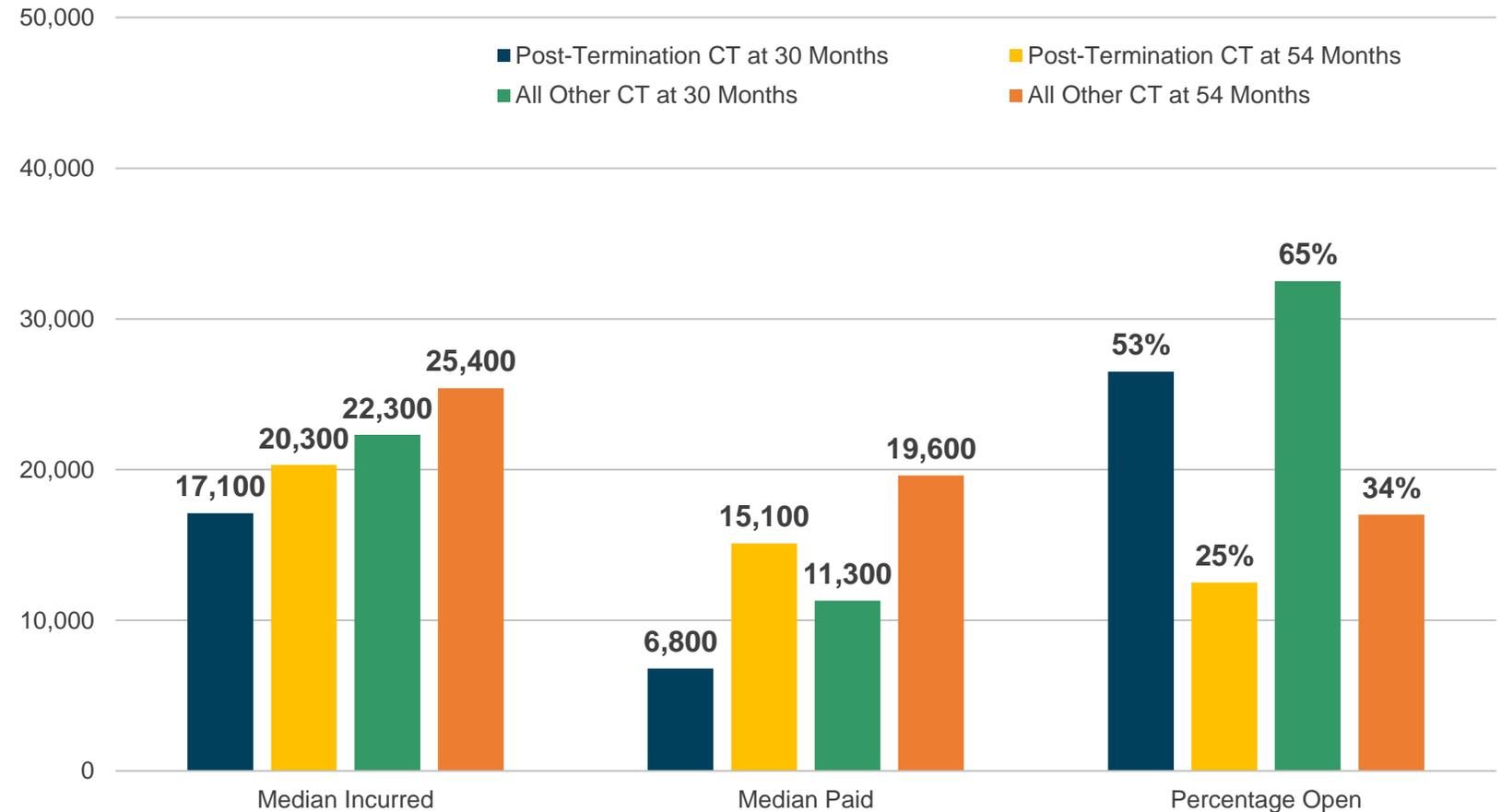




Chart 29

- Partially denied CT claims, which involve multiple injured body parts where at least one was accepted, comprise 25% of all CT claims.
- Partially denied CT claims cost more than other CT claims and develop more over time.
- Fully denied CT claims still end up costing over \$10,000 on average and many remain open even after 5 years.

Post-Survey CT Claim Development Denied Claims for Accident Years 2012-2014

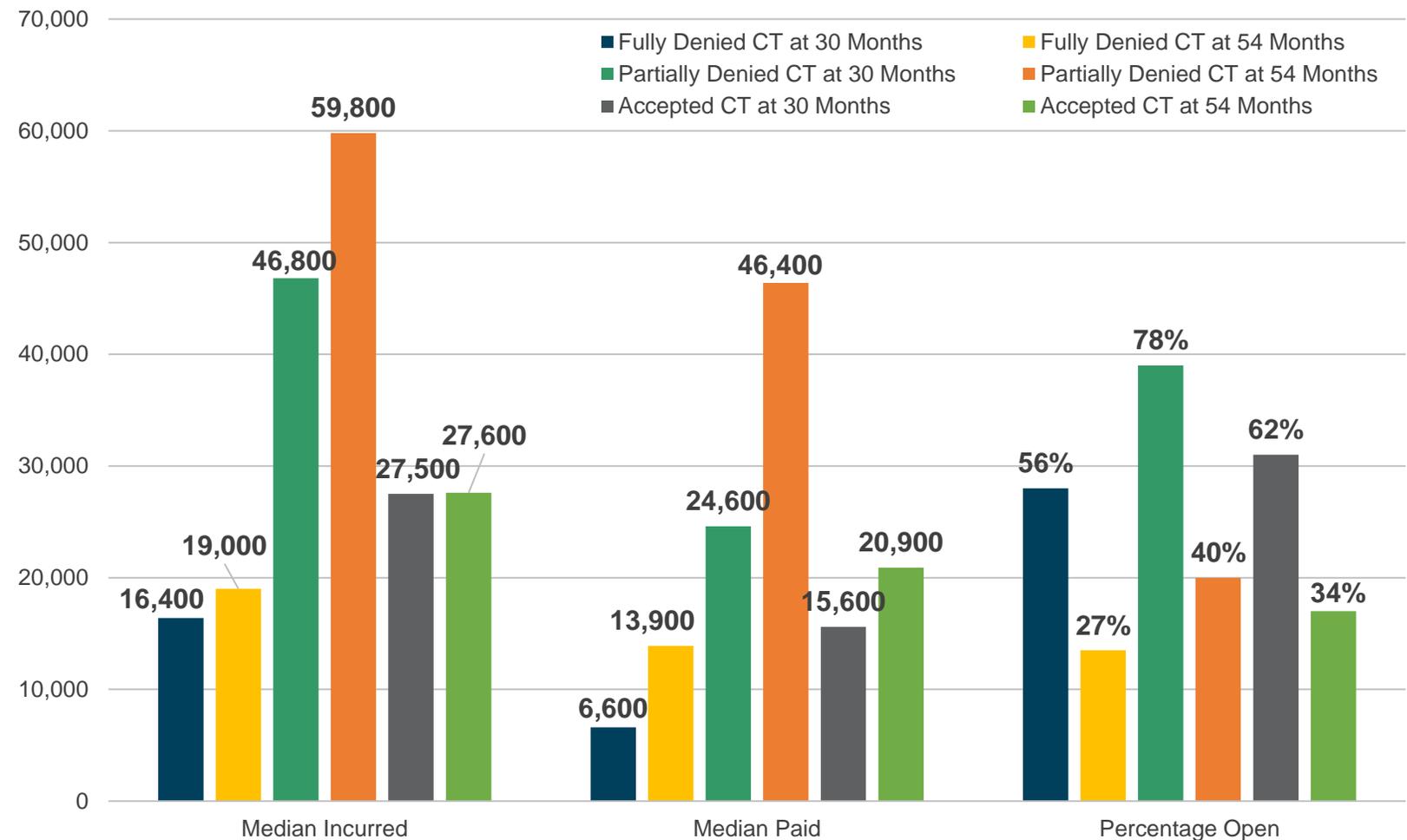




Chart 30

- CT claims with a specific component cost less initially as some of the losses may be paid on the associated claim.
- These claims develop significantly more and also close slower than other CT claims due to the higher complexity of these cases.

Post-Survey CT Claim Development

Claims with Specific Component for Accident Years 2012-2014

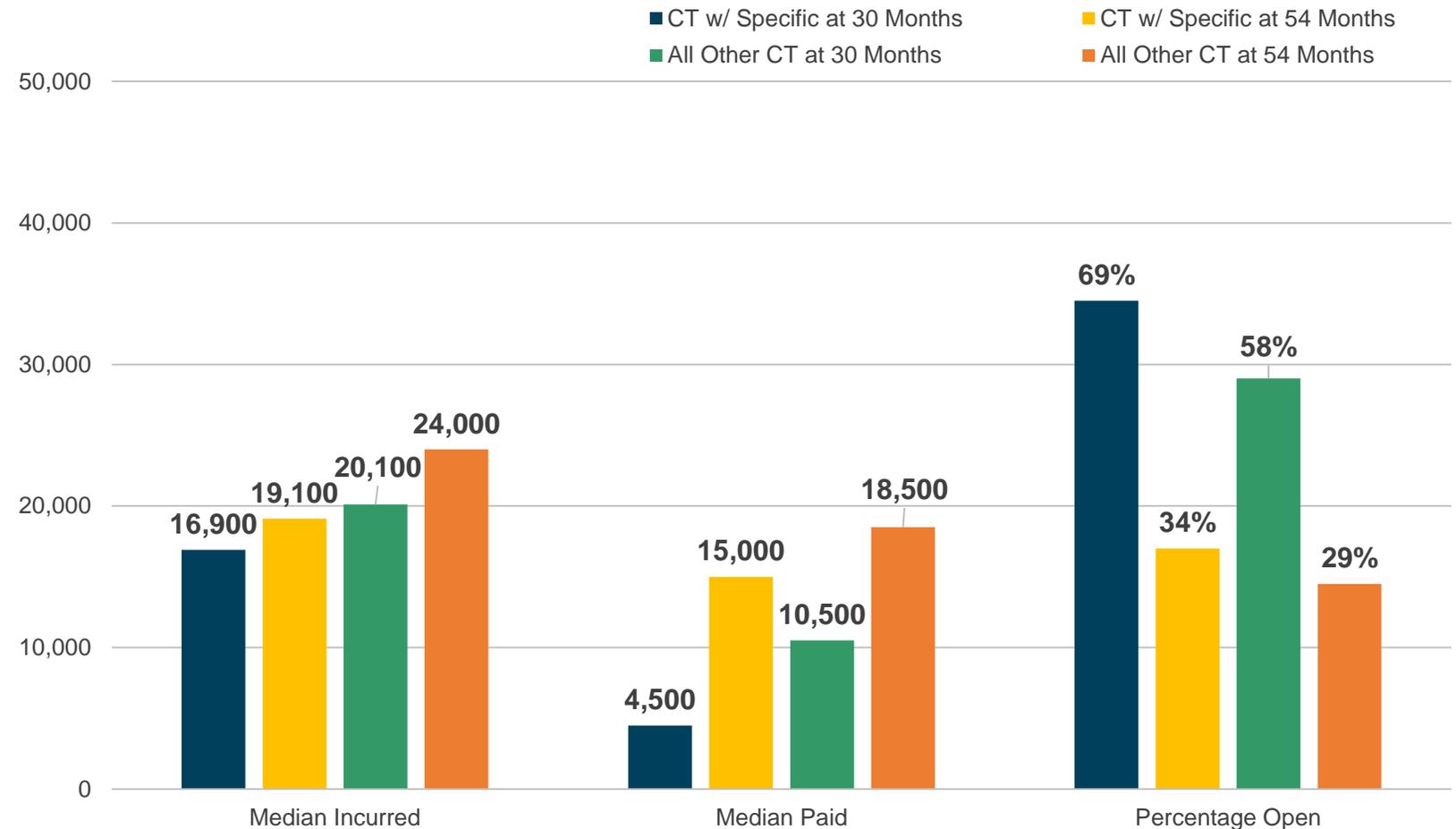


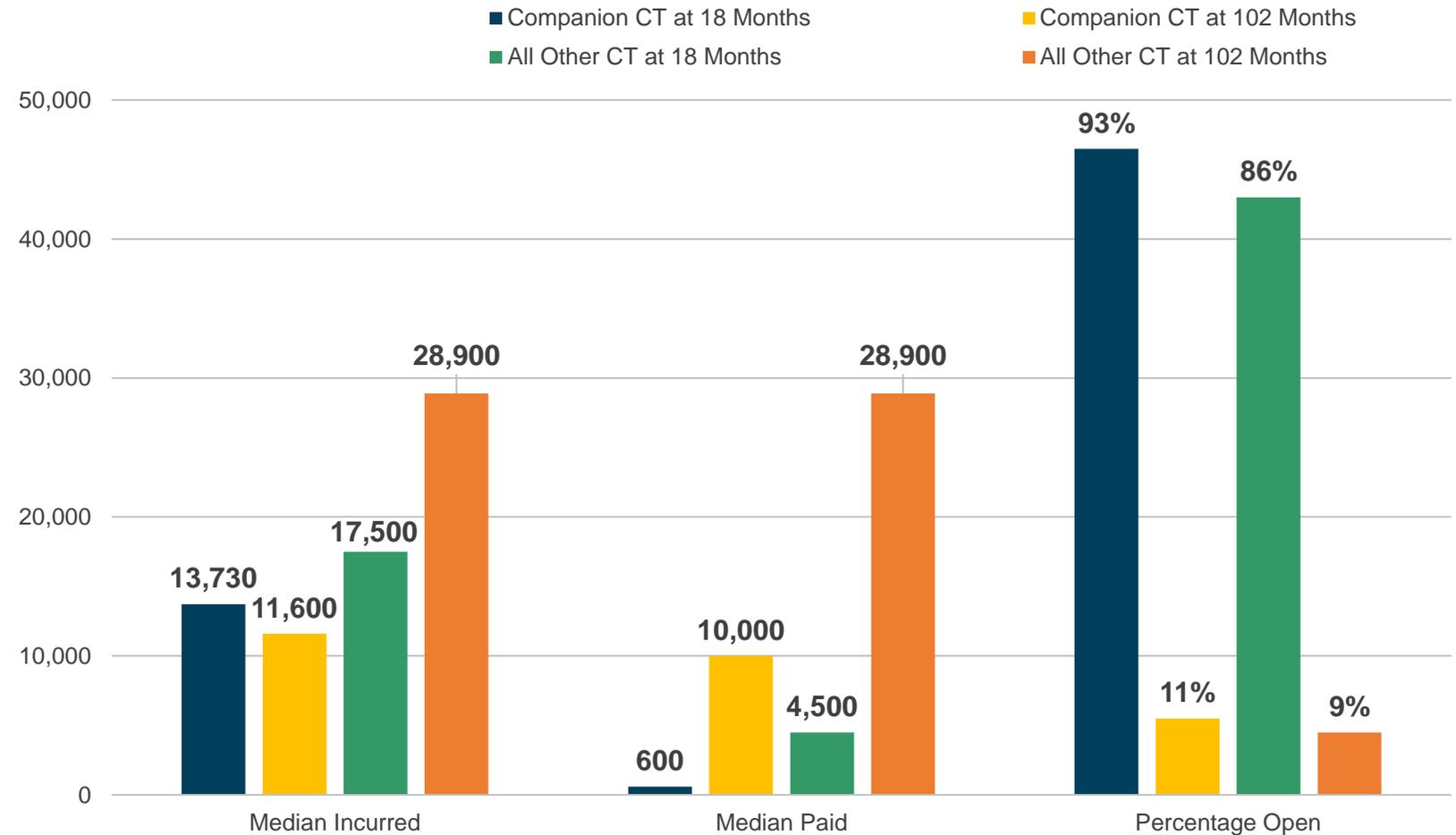


Chart 31

- Very little is paid on CT claims with a specific component early on.
- Some of the early reserves for CT claims with a specific component may overstate the ultimate cost for the claim, which may initially be spread across multiple claims.
- The total cost for all multiple claims from the same claimant is difficult to determine, but likely much closer to the average cost for a single CT claim.

Post-Survey CT Claim Development

Claims with Specific Component for Accident Years 2007-2010



More Info



Chart 32

- The vast majority of CT claims are represented.
- Represented CT claims have similar payments to other CT claims early on, but are double in size just two years later.
- Represented CT claims close about twice as slow as other CT claims.

Post-Survey CT Claim Development Represented Claims for Accident Years 2012-2014

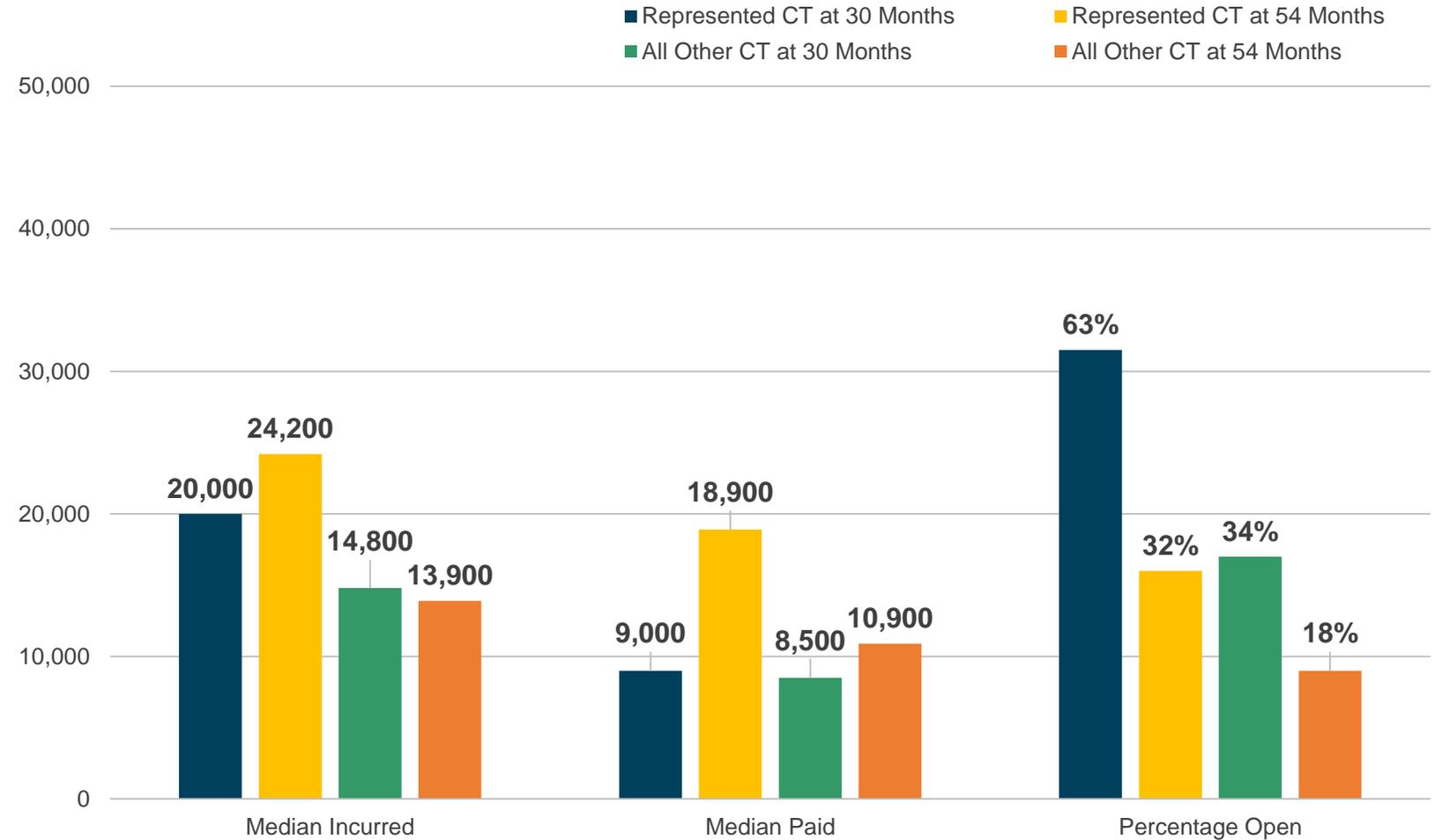




Chart 33

- At very early maturities, represented CT claims have significantly less payments compared to other CT claims.
- Represented CT claims are typically more than twice the cost of other CT claims once they are settled.

Post-Survey CT Claim Development Represented Claims for Accident Years 2007-2010

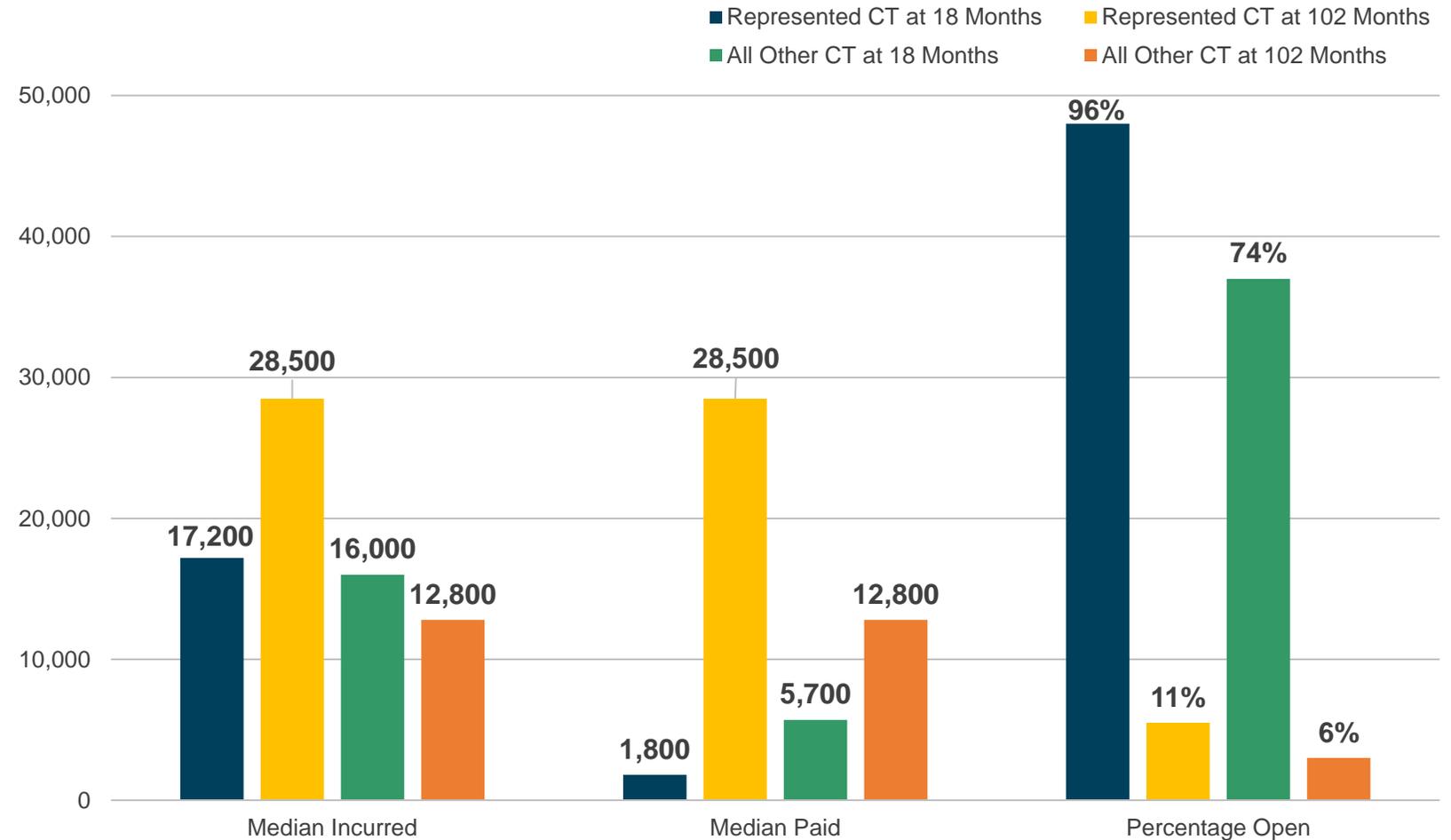




Chart 34

- CT claims are twice as likely to involve an alleged mental stress or psychiatric component compared to non-CT claims.
- The vast majority of alleged mental stress or psychiatric components on CT claims are initially denied.
- CT claims have a higher probability of involving interpreters than non-CT claims.

Additional Characteristics of Surveyed Claims

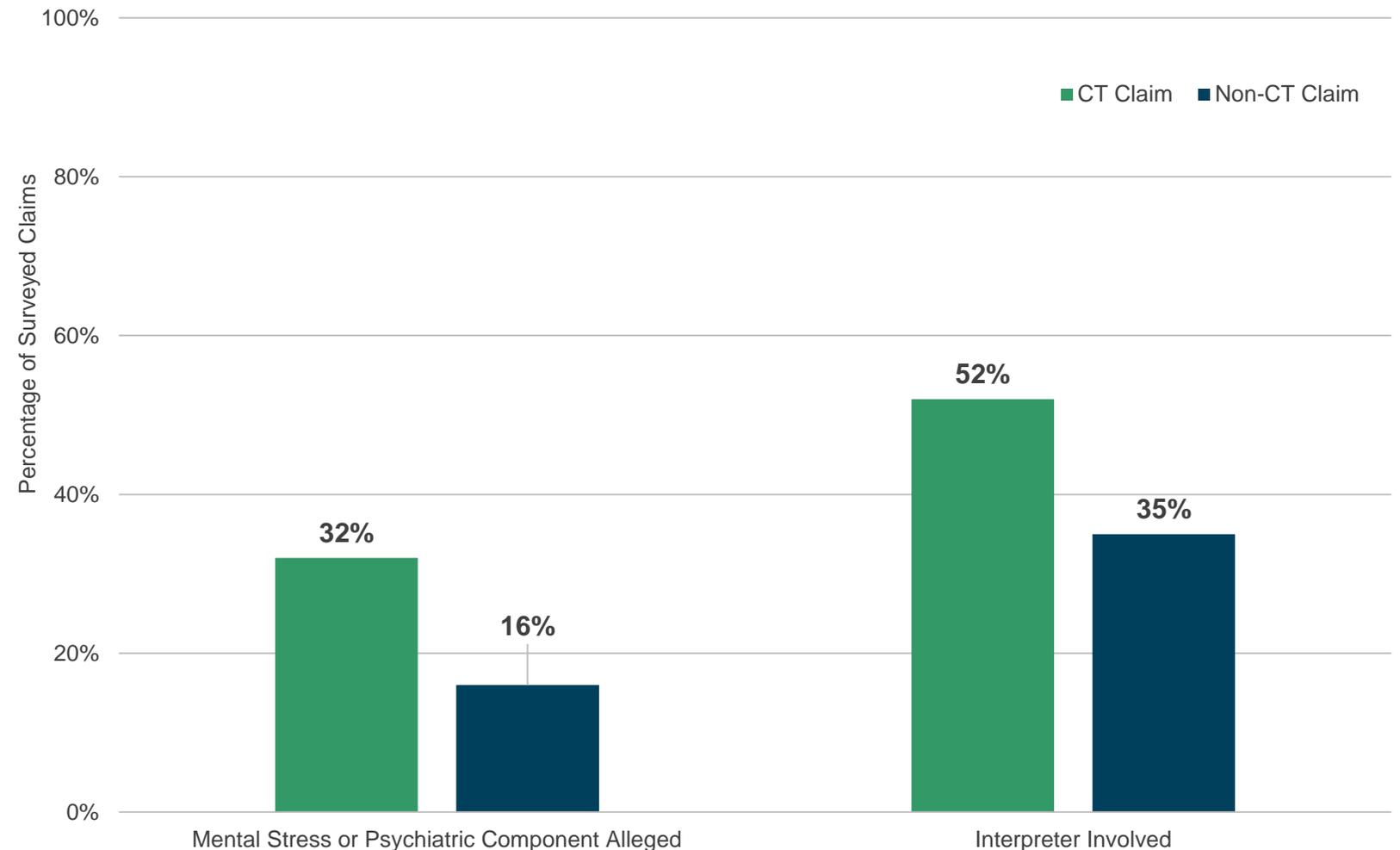
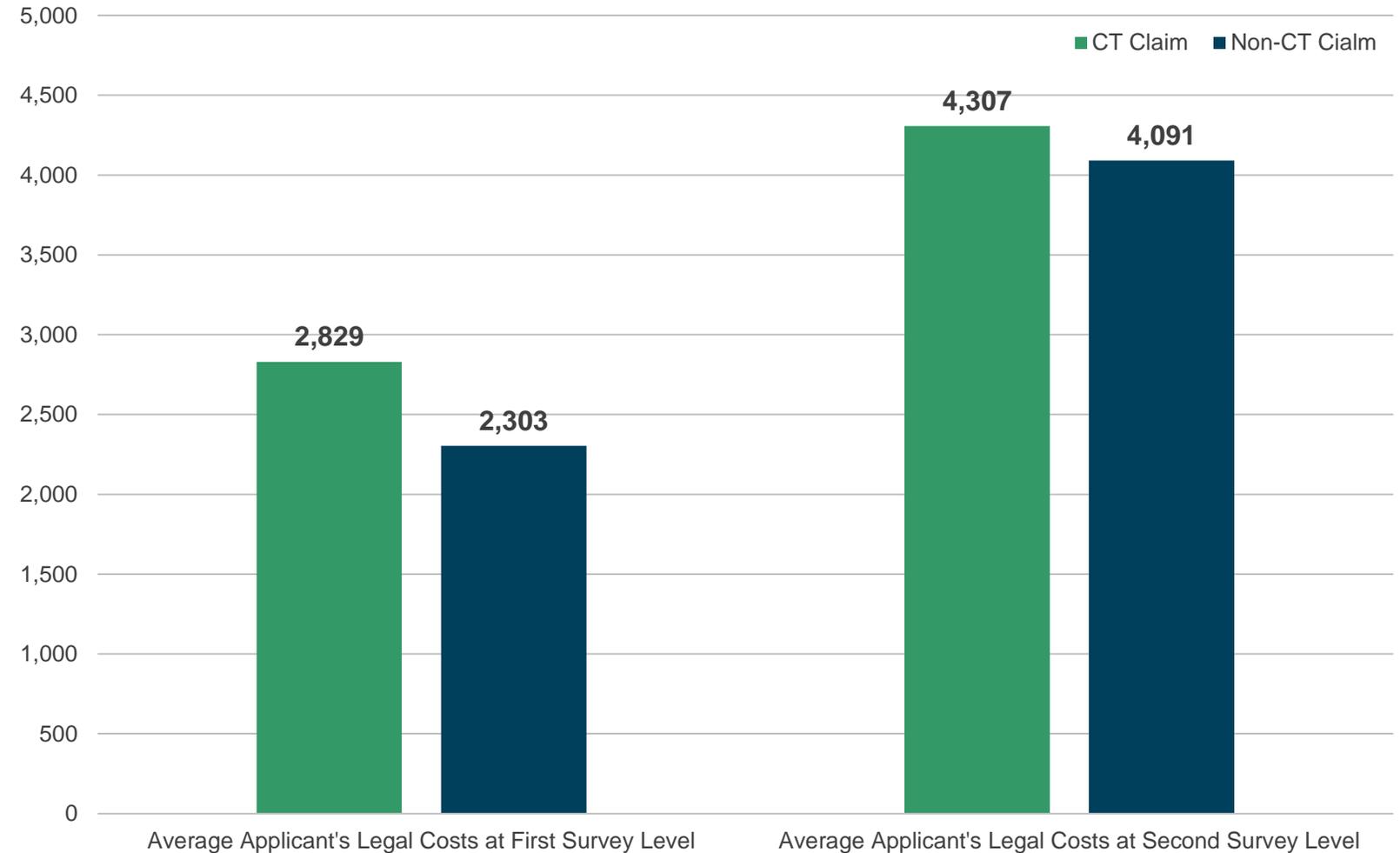




Chart 35

- Average applicant's legal costs for CT claims are moderately higher than those for other permanent disability claims.

Average Applicant's Legal Costs





Area 4: Medical Service Characteristics

Medical costs are the largest component of the California workers' compensation system. Different types of injuries have different medical treatment patterns, and CT claims are no exception. CT claims not only have different medical treatments, they also incur a significantly larger proportion of medical-legal and lien payments.

This area also analyzes medical treatment patterns by age of claim. Most specific injury claims incur more physician services early on and more pharmaceutical and surgical services later. CT claims, particularly from the Los Angeles Basin, have significantly more liens and psychiatric services and fewer surgeries. The Los Angeles Basin CT claims also have a growing share of brand drugs and pharmaceuticals dispensed from a physician office.





Chart 36

- CT claims represent only 4% of all medical paid in the first year of claims, but 25% of medical-legal and lien payments.
- In later periods, CT claims are 16% of all medical paid with somewhat higher shares of medical-legal and lien payments.

Summary of Key Findings

More Info

Medical Services Paid on CT Claims as a Percentage of Total Paid

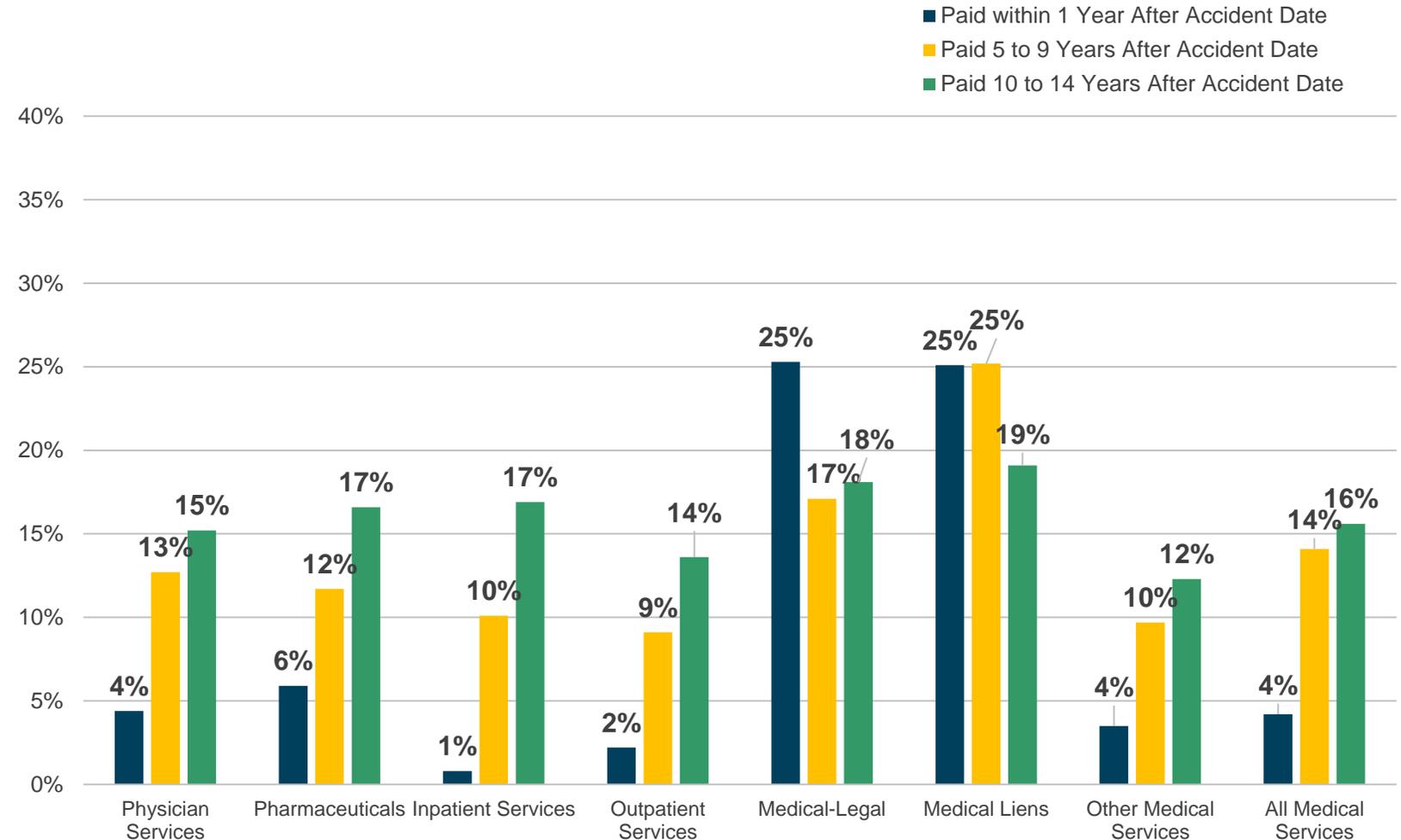




Chart 37

- CT claims are more likely to involve medical-legal reports and the reports on average cost more.
- Declines in average medical-legal costs in 2017 across all claim types were driven by changes in the regulation of the more complex reports.

Medical-Legal Cost Trends

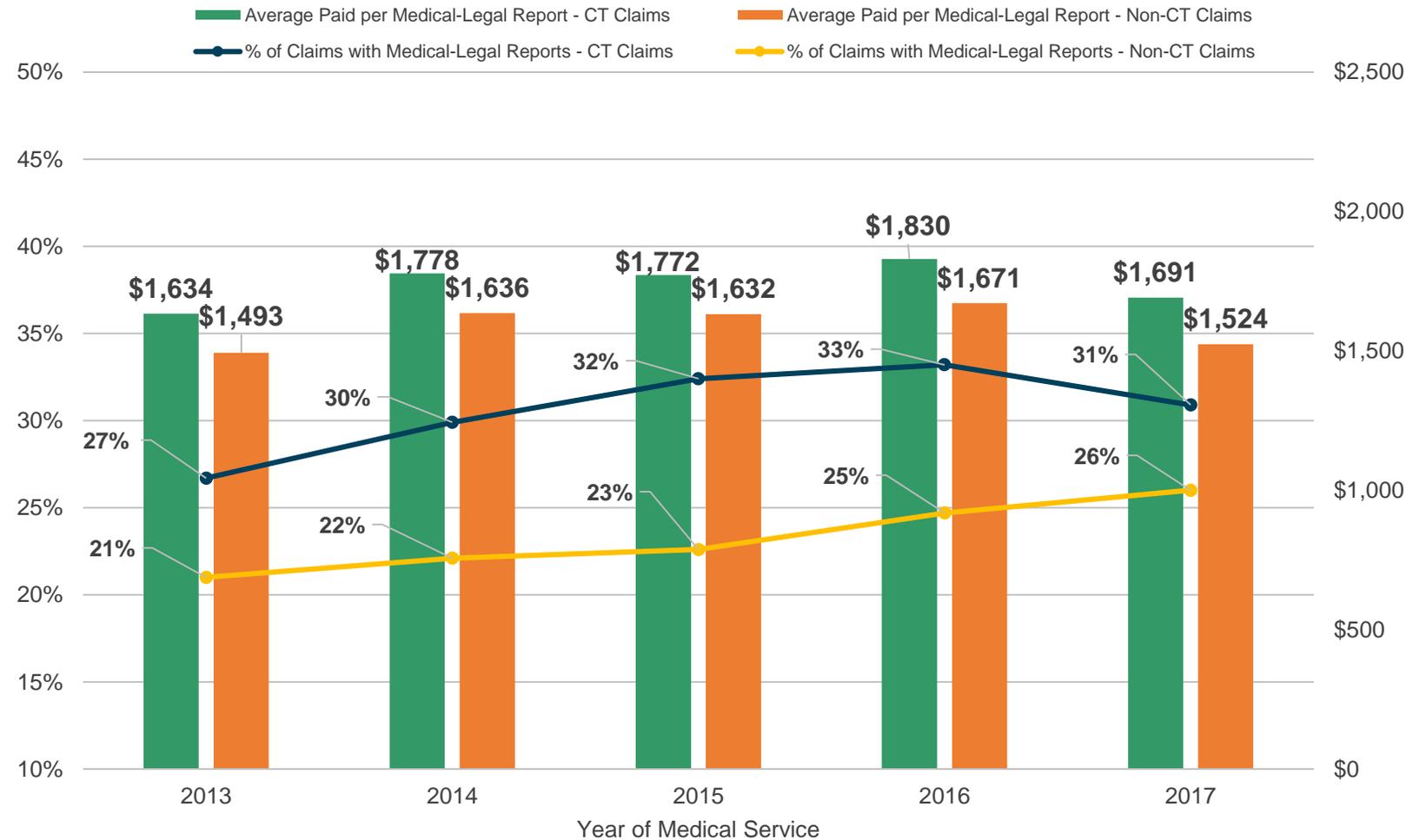




Chart 38

- A much larger percentage of liens come from CT claims compared to their share of claim counts, likely driven by the higher denial rates on CT claims.
- The average cost of a lien on a CT claim is somewhat lower than for a lien on a specific injury claim.
- Liens on CT claims are filed much earlier than liens on specific injury claims.

Lien Filings for 2013 through 2016

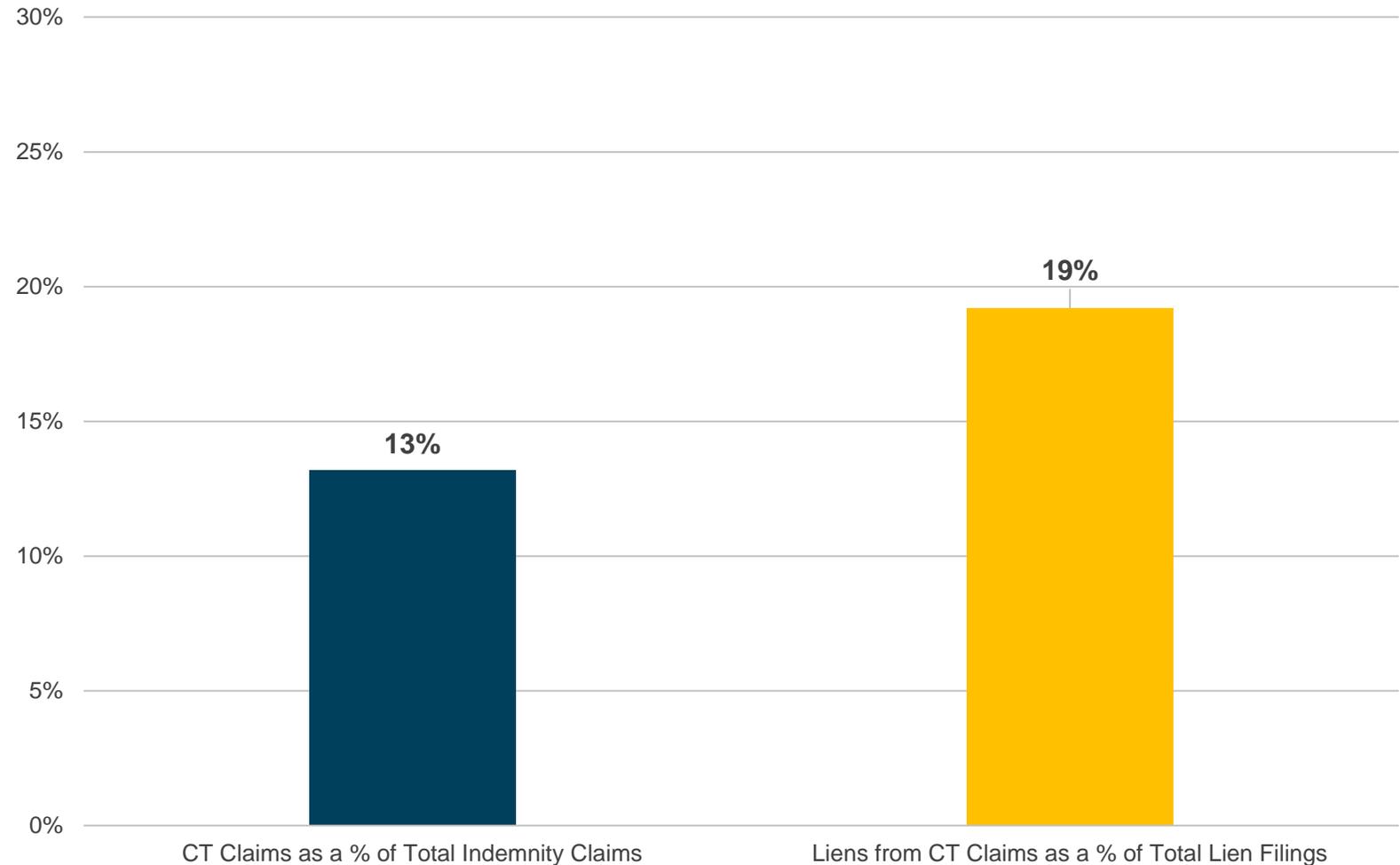




Chart 39

- 5 out of 7 of the top diagnosis for CT claims involve injuries to the upper limbs, representing 25% of medical transactions.
- Specific injury claims are much more likely to involve back injuries or sprains.

Top Seven Medical Diagnoses

Top 7 Diagnoses for CT Claims	
Diagnosis	Percent of Transactions
Carpal Tunnel Syndrome	9.0%
Neck Sprain	5.7%
Hand/Wrist Tenosynovitis	5.6%
Wrist Sprain	4.2%
Lateral Epicondylitis	3.5%
Shoulder/Arm Sprain	3.2%
Lumbar Region Sprain	3.0%
Top 7	34.2%

Top 7 Diagnoses for Non-CT Claims	
Diagnosis	Percent of Transactions
Lumbar Region Sprain	7.9%
Shoulder/Arm Sprain	3.8%
Neck Sprain	3.6%
Lumbosacral Sprain	2.3%
Lumbago (Low Back Pain)	1.9%
Knee/Leg Sprain	1.9%
Wrist Sprain	1.9%
Top 7	23.3%



Chart 40

- For CT claims in the Los Angeles Basin during the 1st development year, medical-legal has the second highest share of medical payments and is virtually nonexistent in other types of claims.
- Specific injury claims have much more inpatient and outpatient services than CT claims in the first year.

Share of Total Medical Payments by Service Type Accident Years 2013 to 2016 at 1st Development Year

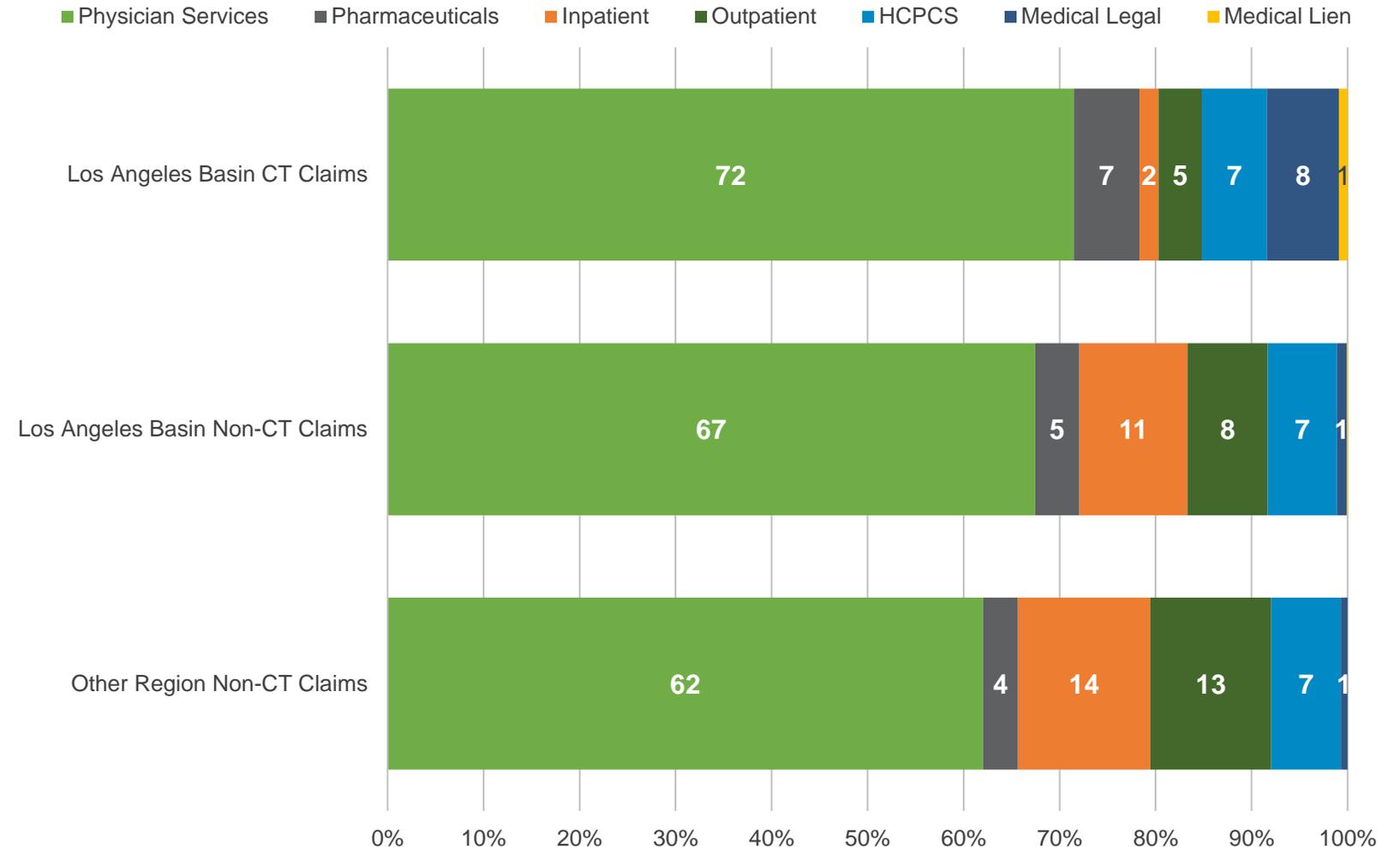




Chart 41

- For CT claims in the Los Angeles Basin during the 5th development year, liens and medical-legal costs contributed to more than half of the total medical payments.
- Significant lien payments also occur on specific injury claims from the Los Angeles Basin, but not in other regions of California.

Share of Total Medical Payments by Service Type Accident Years 2009 to 2012 at 5th Development Year

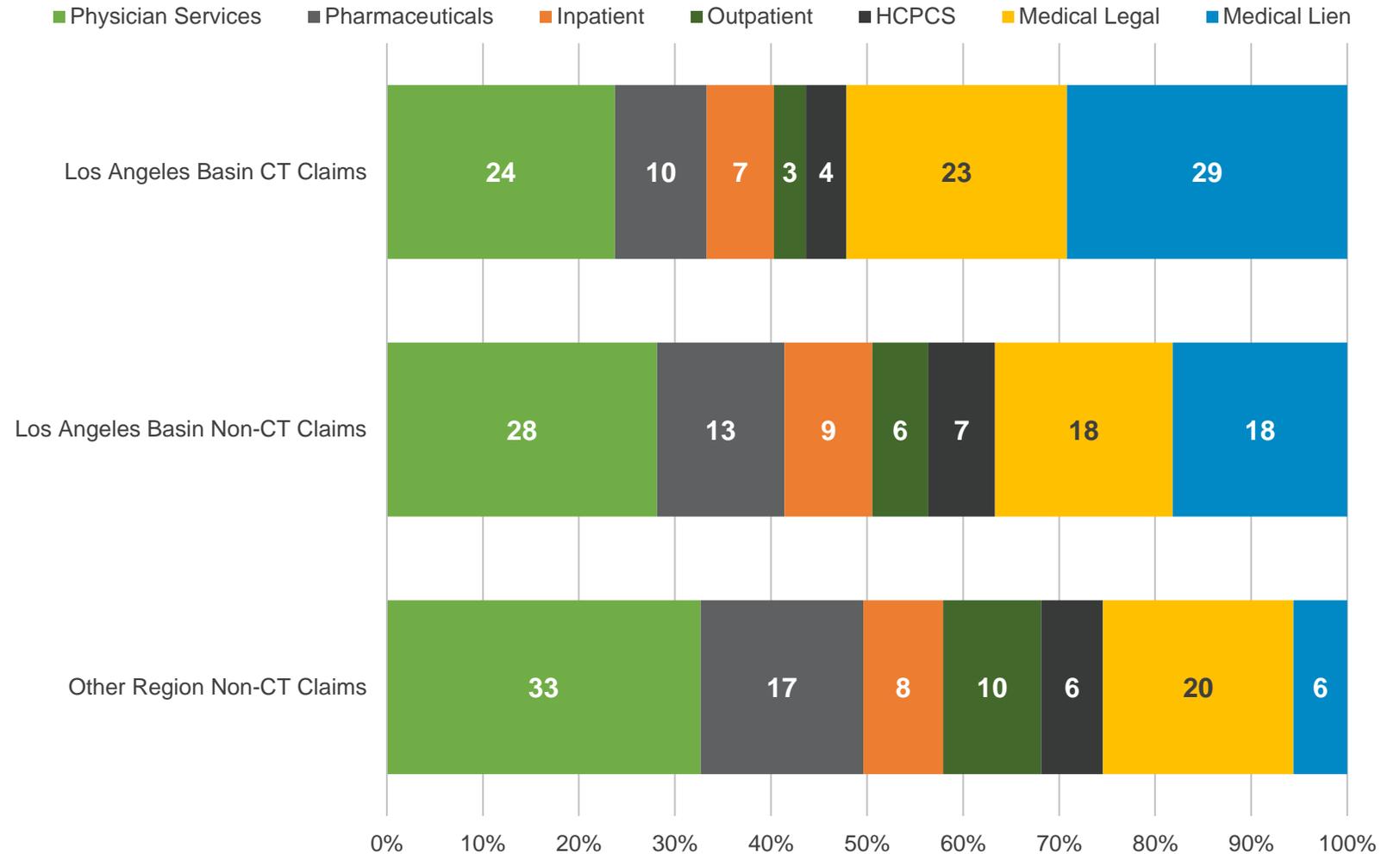




Chart 42

- For all claims at the 10th development year, pharmaceutical costs have the largest contribution to total medical payments.
- The distribution of medical services for claims in the Los Angeles Basin does not differ much between CT and specific injury for this later period and continue to include significant payments on liens.

Share of Total Medical Payments by Service Type Accident Years 2004 to 2007 at 10th Development Year

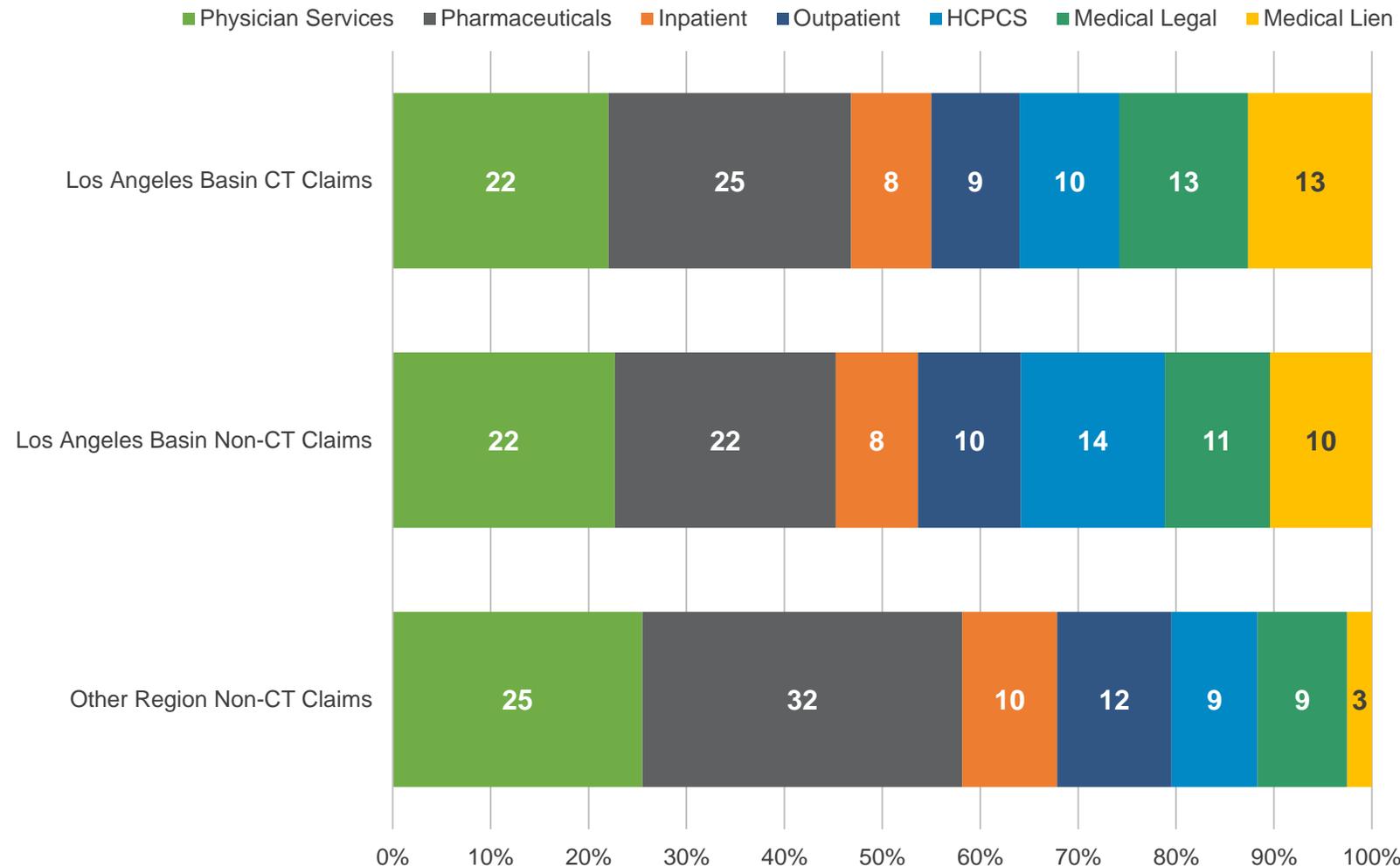




Chart 43

- CT claims have a higher percentage of medical payments in the first year to psychiatric and neurology providers.

Share of Total Medical Payments by Provider Type Accident Years 2013 to 2016 at 1st Development Year

■ Hospital
 ■ Specialist/MD
 ■ Physical Medicine
 ■ Surgeon
 ■ Psychiatric
 ■ ASC
 ■ Pharmacist
 ■ DME Provider
 ■ Other

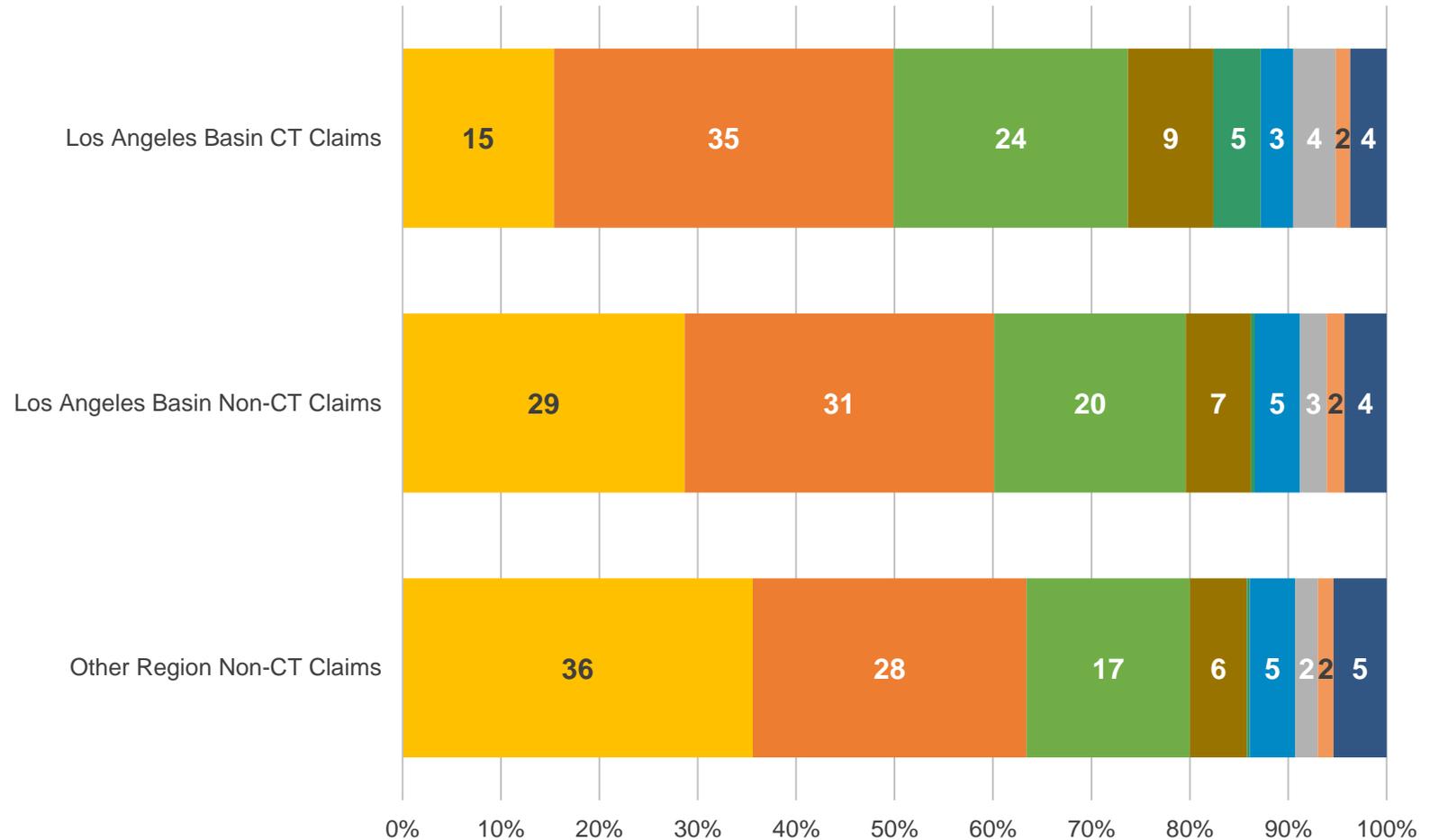




Chart 44

- At the 5th development year, CT claims from the Los Angeles Basin have more services from surgeons and psychiatric providers.

Share of Total Medical Payments by Provider Type Accident Years 2009 to 2012 at 5th Development Year

■ Hospital
 ■ Specialist/MD
 ■ Physical Medicine
 ■ Surgeon
 ■ Psychiatric
 ■ ASC
 ■ Pharmacist
 ■ DME Provider
 ■ Home Health
 ■ Other

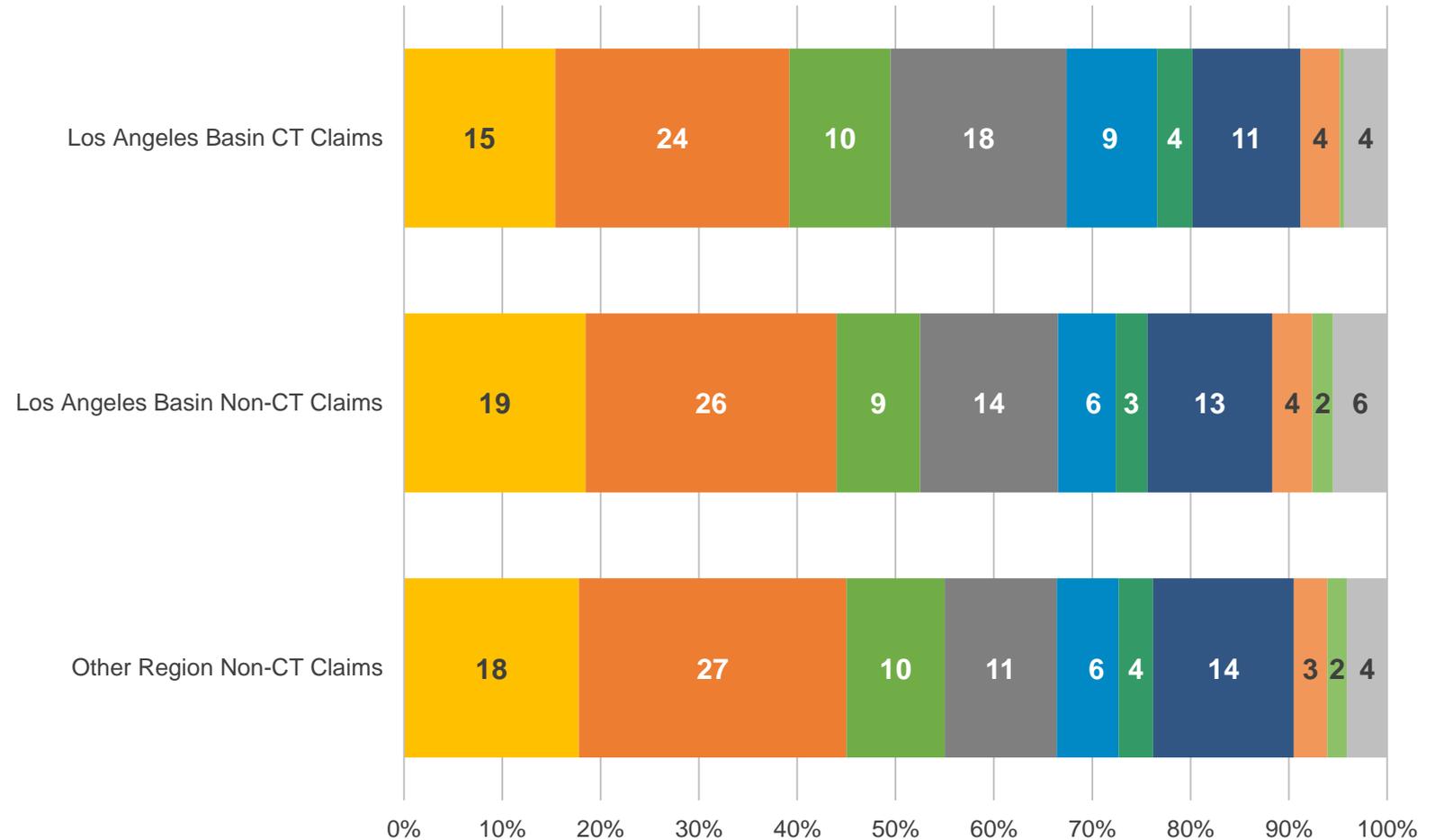




Chart 45

- Payments to pharmacists comprise more than a quarter of total medical payments for claims in their 10th development year.
- Claims from the Los Angeles Basin have a higher share of total medical payments from home health providers for both CT and specific injury claims.

Share of Total Medical Payments by Provider Type Accident Years 2004 to 2007 at 10th Development Year

■ Hospital ■ Specialist/MD ■ Physical Medicine ■ Surgeon ■ Psychiatric ■ ASC ■ Pharmacist ■ DME Provider ■ Home Health ■ Other

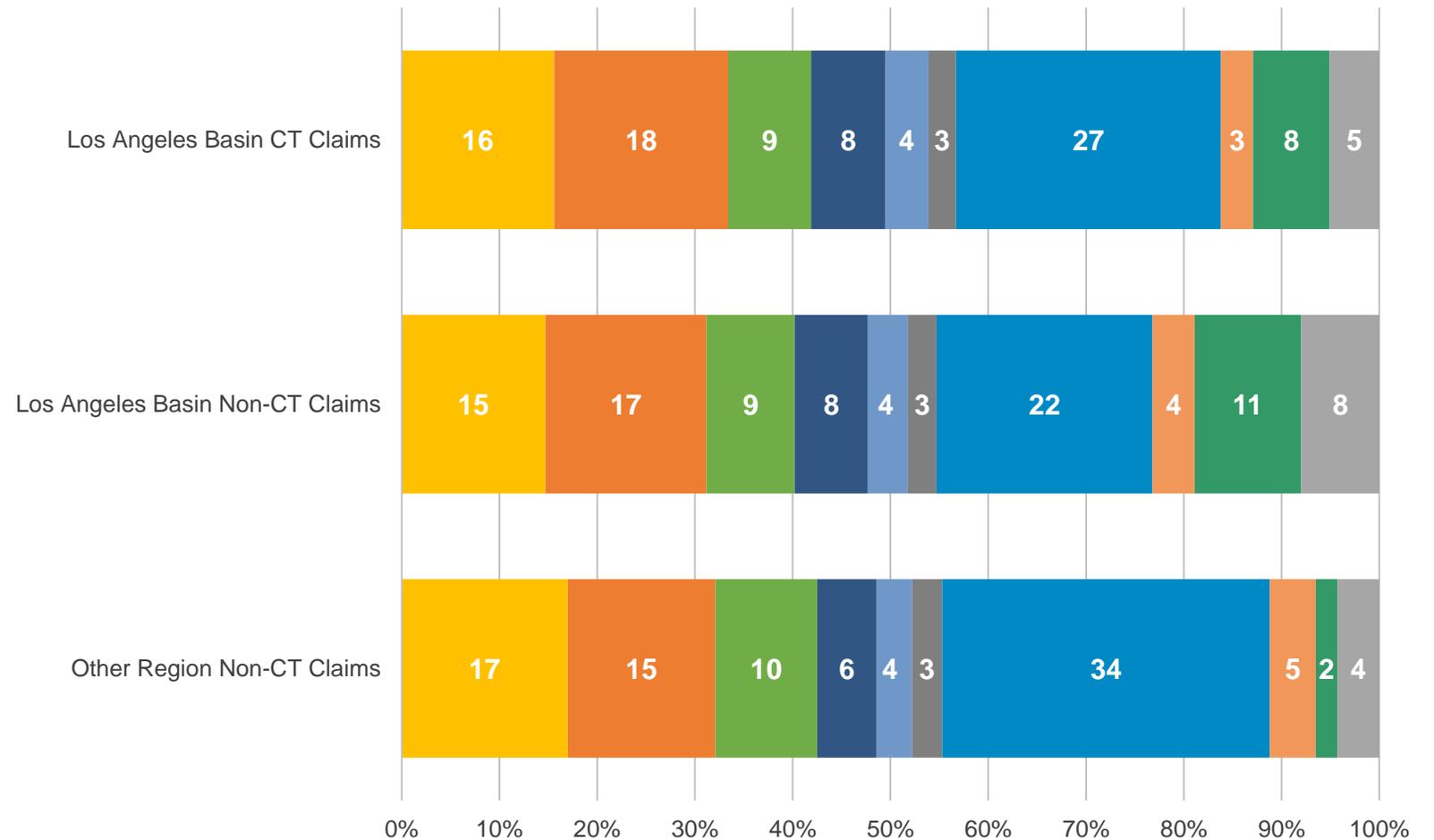


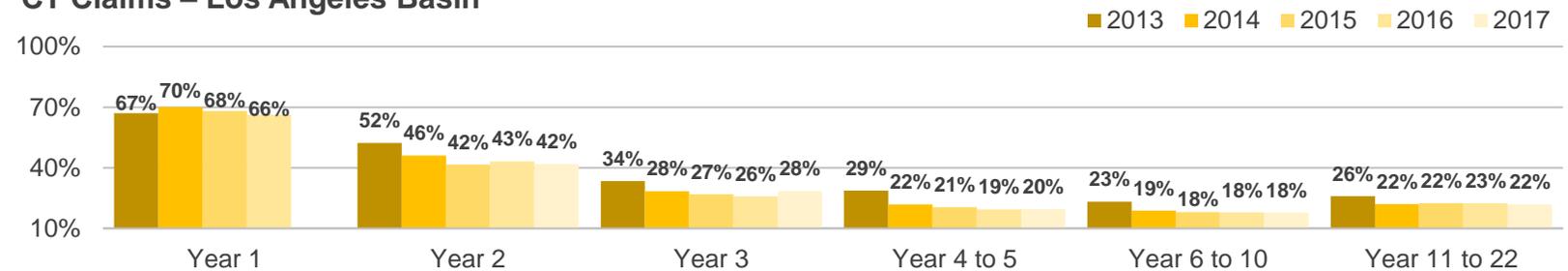


Chart 46

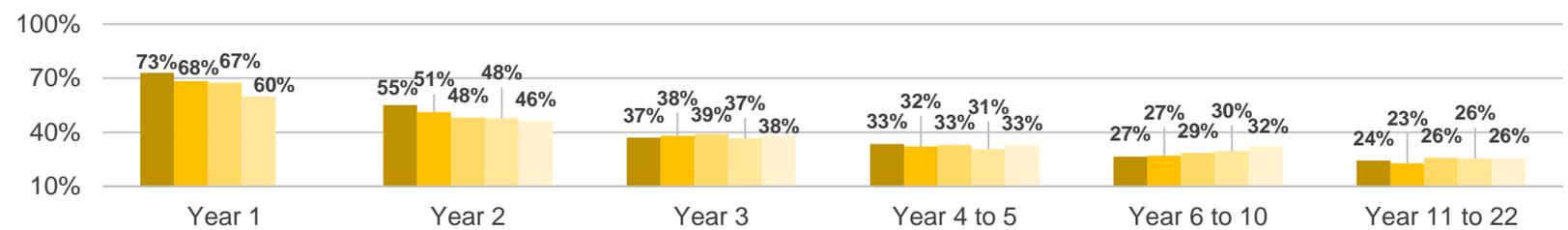
- Payments for physician services after the 3rd year have decreased significantly for Los Angeles Basin CT claims while they have grown in claims from other regions of California.
- The decreases in physician services for CT claims are due to increasing shares of other “frictional cost” services such as medical-legal and liens.

Share of Total Medical Services Paid by Age and Service Type | Physician Services

CT Claims – Los Angeles Basin



CT Claims – Other Regions



Non-CT Claims

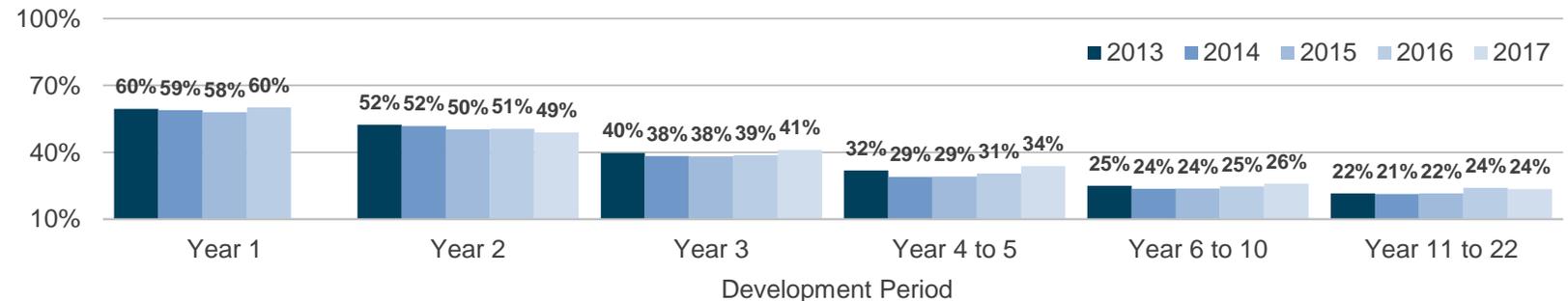


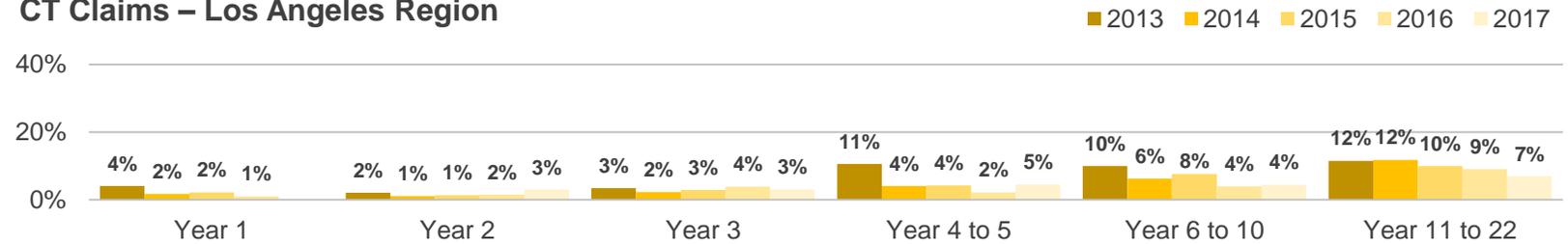


Chart 47

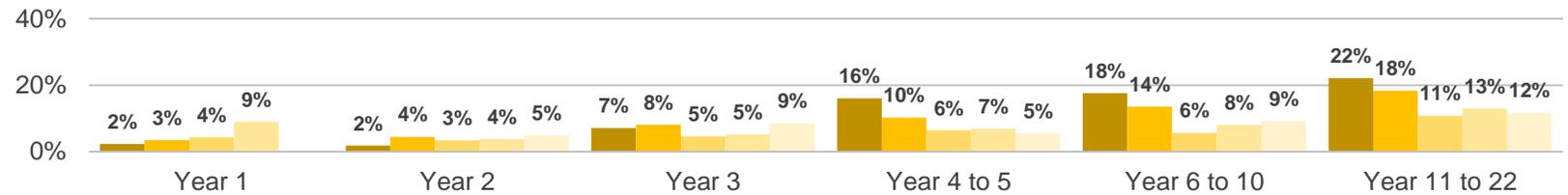
- Very little inpatient services are paid on CT claims early on, though for CT claims outside the Los Angeles Basin the share in the first three years has grown.
- In later periods, shares of inpatient services have declined significantly for CT claims though by a more modest amount for specific injury claims.
- Provisions of Senate Bill No. 863 related to spinal surgeries are a likely driver of these changes.

Share of Total Medical Services Paid by Age and Service Type | Inpatient Services

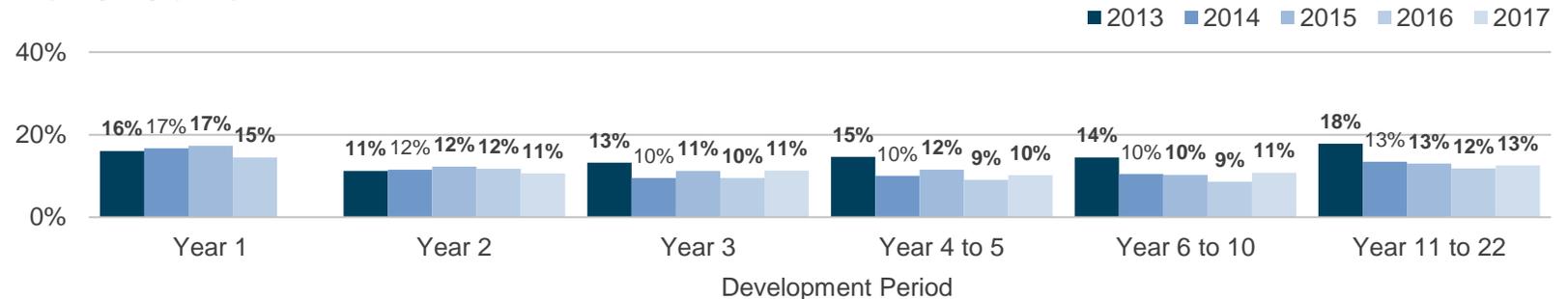
CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims



Development Period

More Info



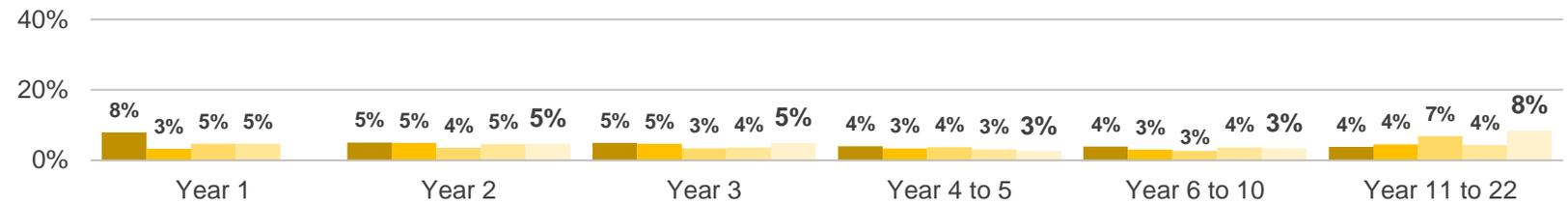
Chart 48

- Much fewer outpatient services are performed on CT claims from the Los Angeles Basin across all development periods.
- Outpatient payment patterns for CT claims from other regions more closely resemble those for specific injury claims and are growing significantly after the 10th development year.

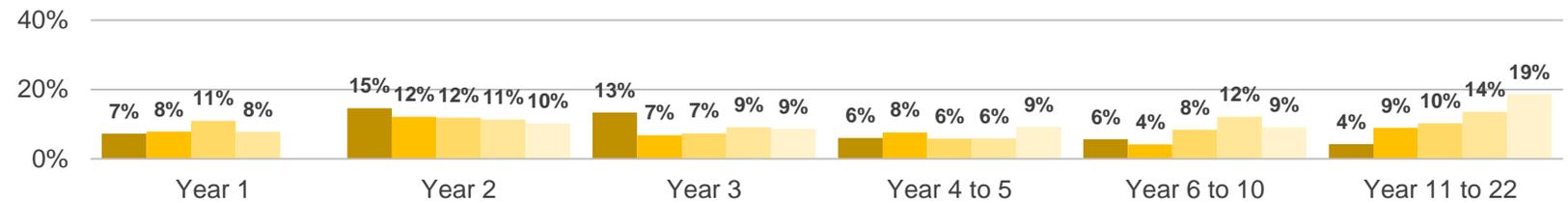
Share of Total Medical Services Paid by Age and Service Type | Outpatient Services

CT Claims – Los Angeles Region

■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017

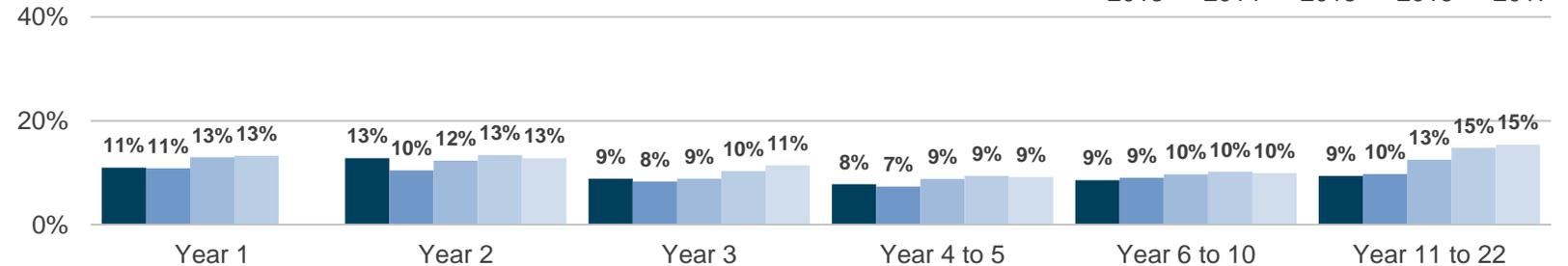


CT Claims – Other Regions



Non-CT Claims

■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017



Development Period

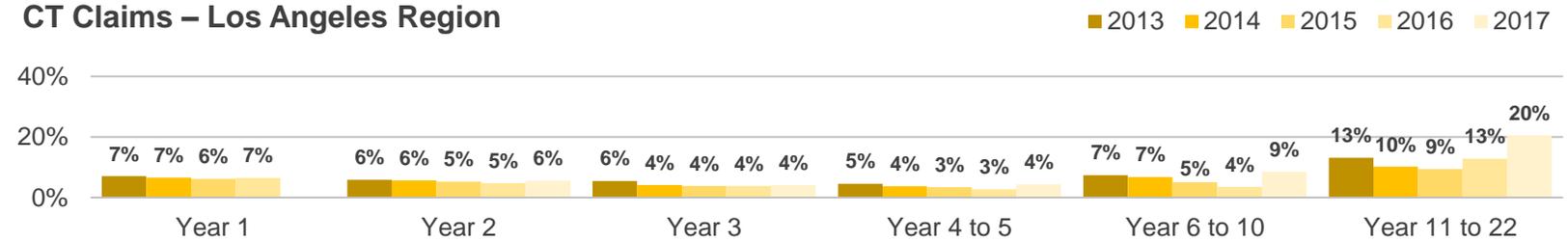


Chart 49

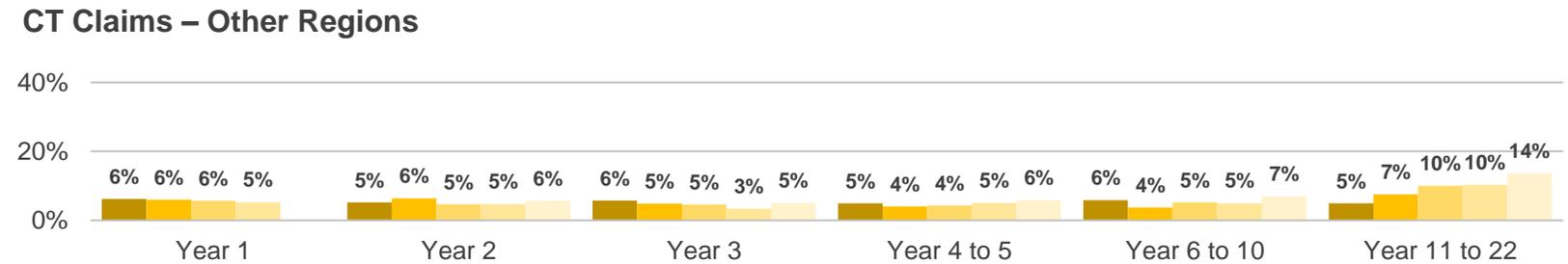
- Shares of medical supplies and equipment costs are increasing for all claims in the 10th and later development periods.
- A somewhat larger share of these services are performed on CT claims from the Los Angeles Basin after the 6th year compared to other CT claims.

Share of Total Medical Services Paid by Age and Service Type | Medical Supplies and Equipment (HCPCS)

CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims

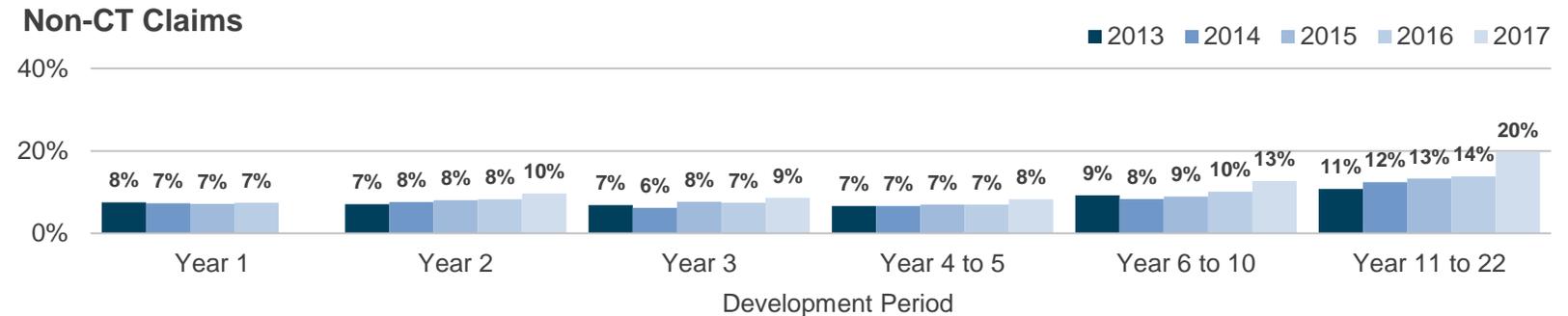


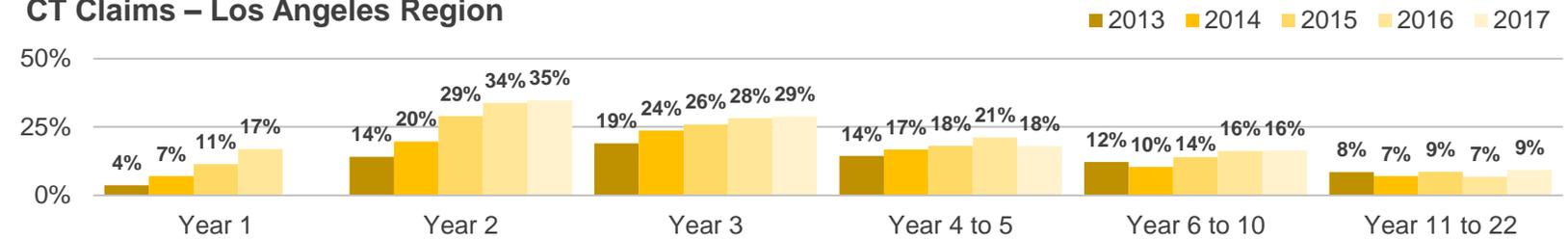


Chart 50

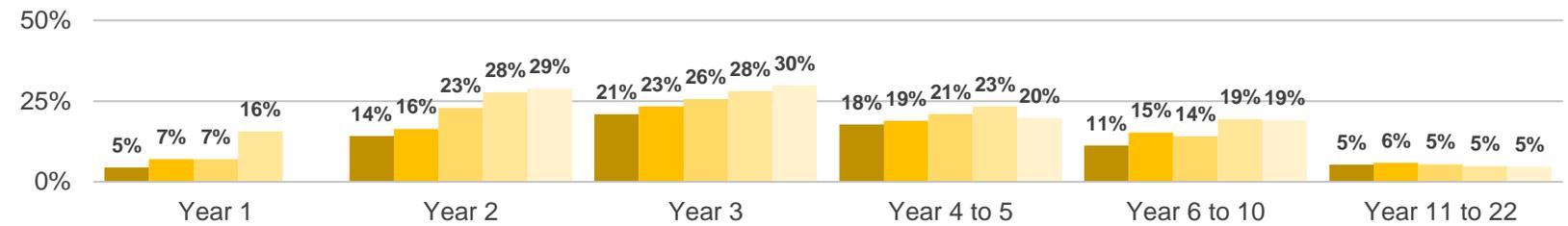
- CT claims have a much greater share of medical-legal services paid early on and it has grown significantly over the last 4 years.

Share of Total Medical Services Paid by Age and Service Type | Medical-Legal

CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims

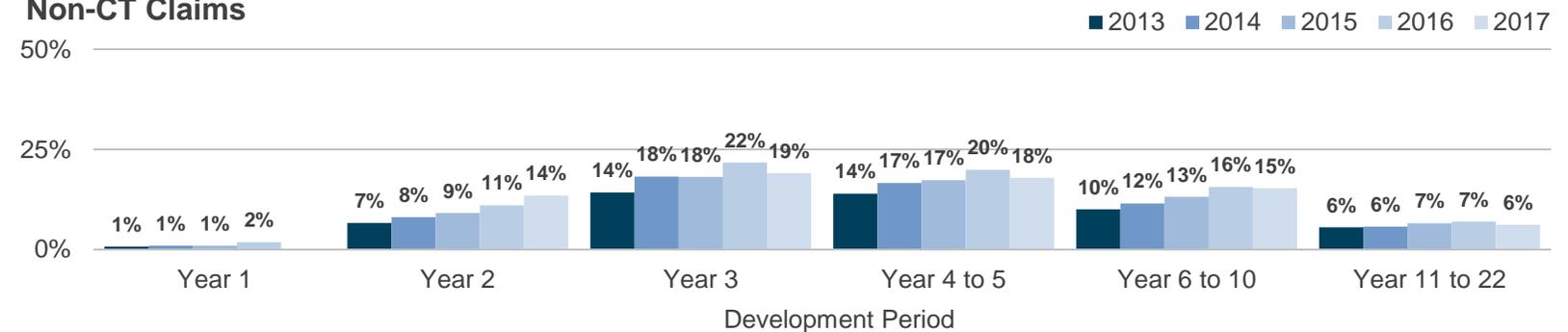


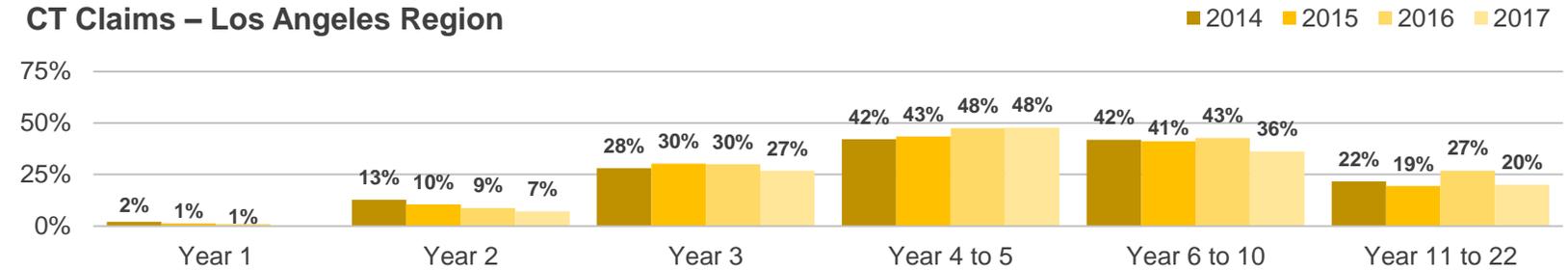


Chart 51

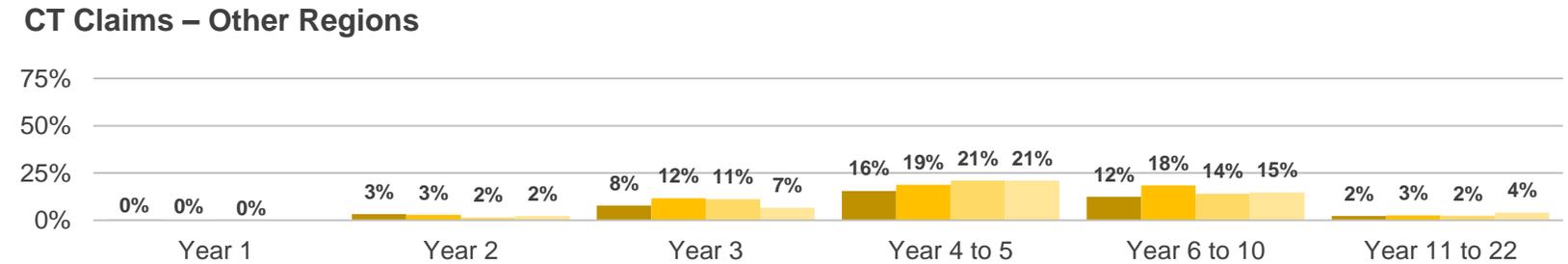
- Liens represent almost half of the payments on CT claims from the Los Angeles Basin in the 4th through 10th development years.
- Virtually no lien payments occur on claims outside the Los Angeles Basin in the early and later periods, and less than 20% of payments in the 3rd through 10th development years are for liens in these regions.

Share of Total Medical Services Paid by Age and Service Type | Liens

CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims

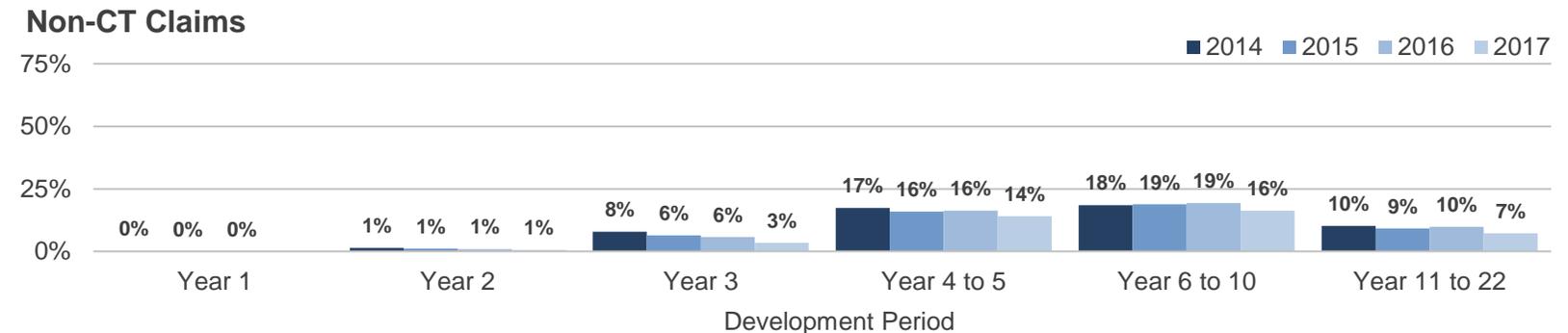


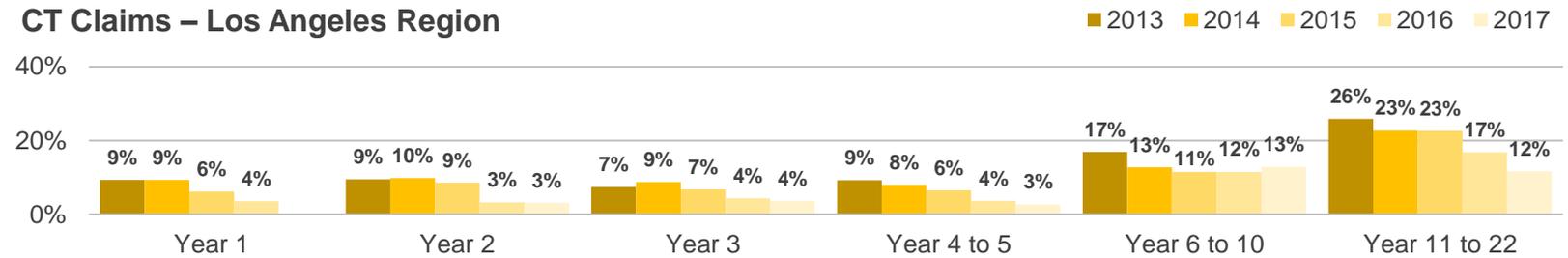


Chart 52

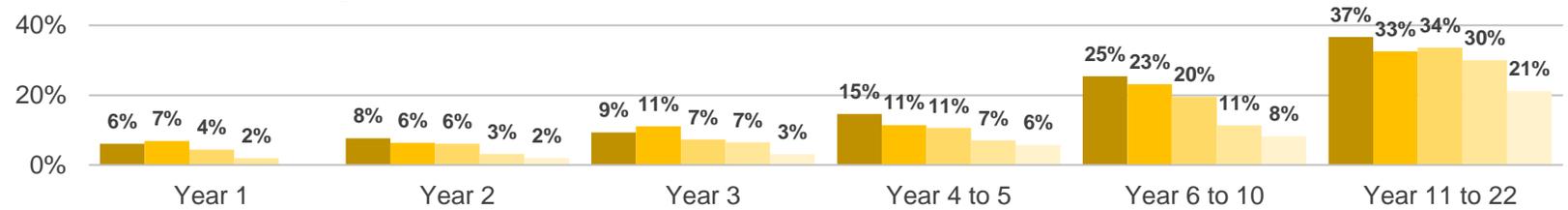
- The share of medical costs for pharmaceuticals increases as claims age.
- While payments for pharmaceuticals have decreased significantly for most claims since 2013, share of pharmaceuticals from Los Angeles region CT claims in the 6th to 10th development years have remained flat.

Share of Total Medical Services Paid by Age and Service Type | Pharmaceuticals

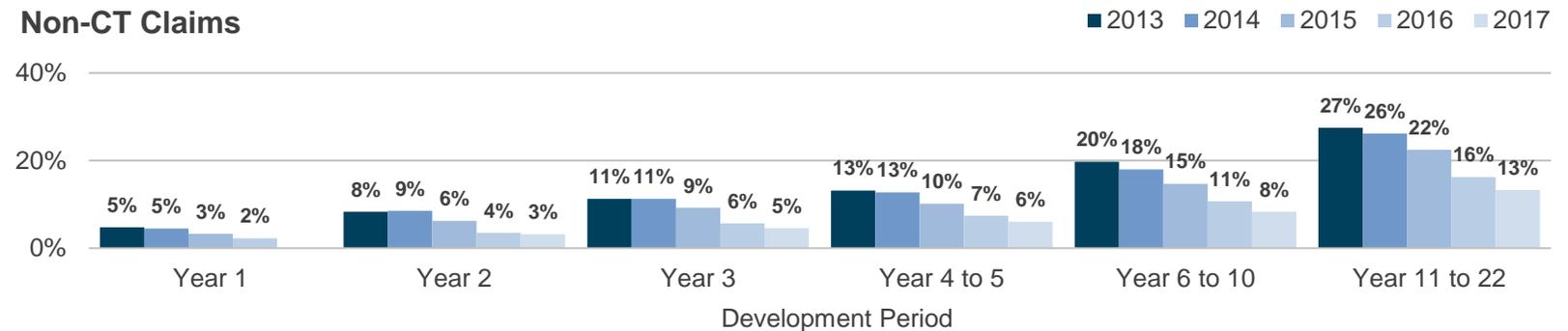
CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims



More Info

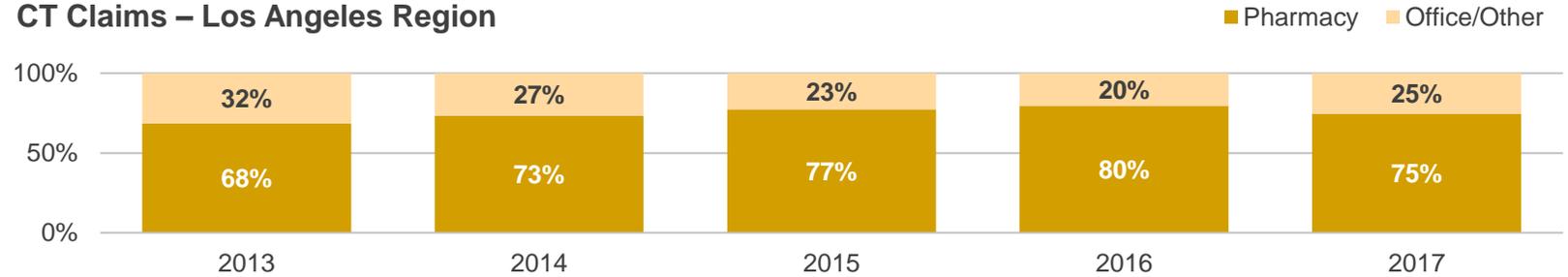


Chart 53

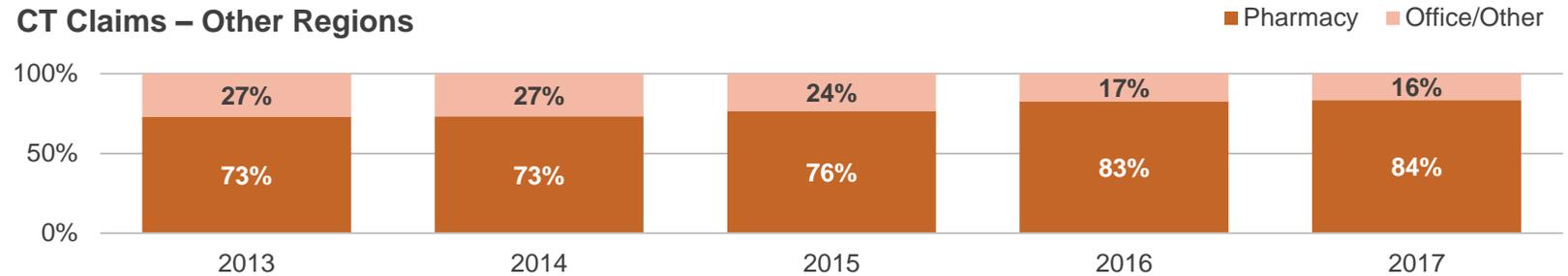
- The proportion of pharmaceuticals dispensed from physician offices is somewhat larger for Los Angeles Basin CT claims than for other CT claims.
- Physician dispensing in Los Angeles Basin CT claims increased in 2017 though it has continued to decline in other regions.

Share of Total Pharmaceutical Paid by Dispensing Place

CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims

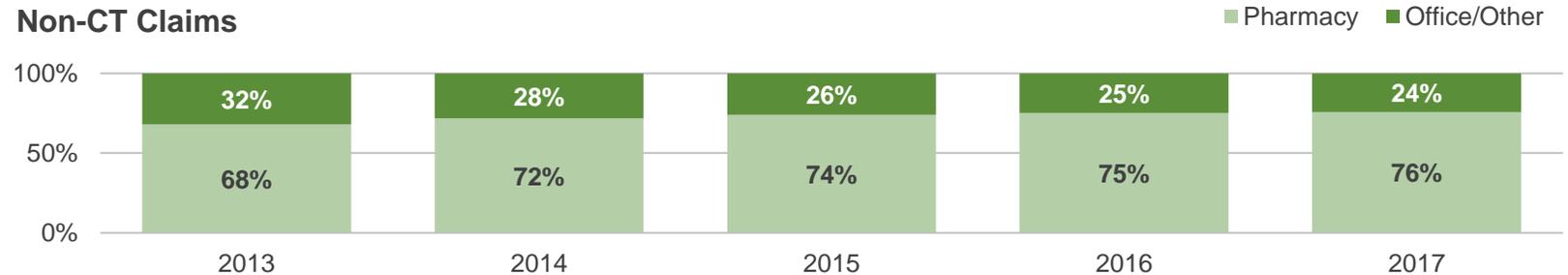


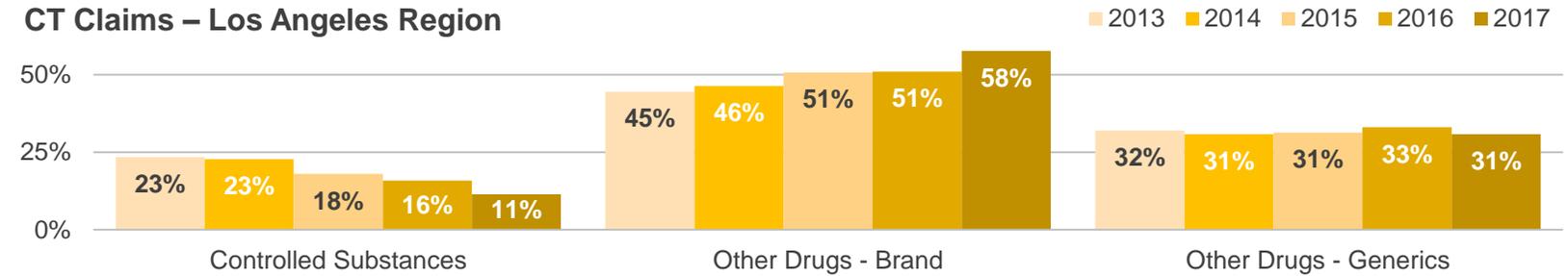


Chart 54

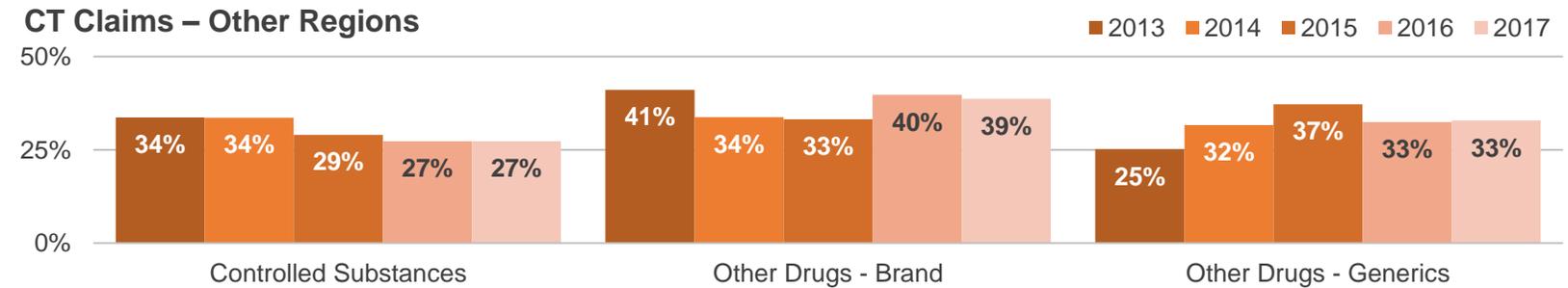
- The share of brand drugs in Los Angeles Basin CT claims has been increasing while the share of generics in other regions has increased.
- Significantly fewer controlled substances are paid on CT claims from the Los Angeles Basin.

Share of Total Pharmaceutical Paid by Drug Type

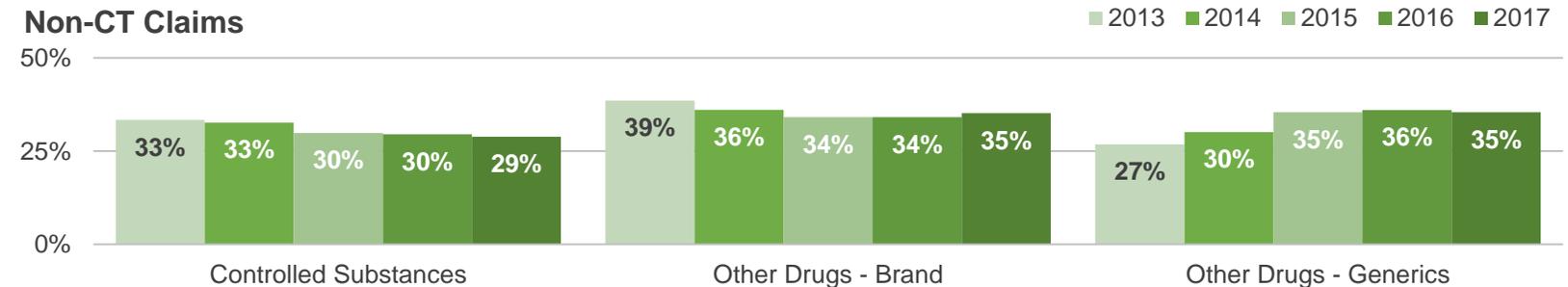
CT Claims – Los Angeles Region



CT Claims – Other Regions



Non-CT Claims





Area 5: Impact on Underlying Cost Trends

CT claims, representing 16% of all indemnity claims, have a significant impact on overall system costs. In addition to being reported slower than specific injury claims, CT claims also have a more prolonged payment pattern, settle much more slowly, and incur significantly more expenses on average. Although CT claims initially cost less on average, due to their slower payout patterns, they develop much higher than specific injury claims and cost more later on. This has resulted in a somewhat modest impact on cost trends, though a significant impact on overall average cost levels.

This area explores the impact of the recent increases in CT claims in loss and ALAE trends including claim frequency, claim payment and settlement patterns, and the average cost of claims.





Chart 55

- Excluding the recent increases in CT claims from frequency trends results in only slightly lower growth rates.
- Only about one-fifth of the recent difference from countrywide frequency patterns is explained by the growth in California CT claims.

Change in Indemnity Claim Frequency

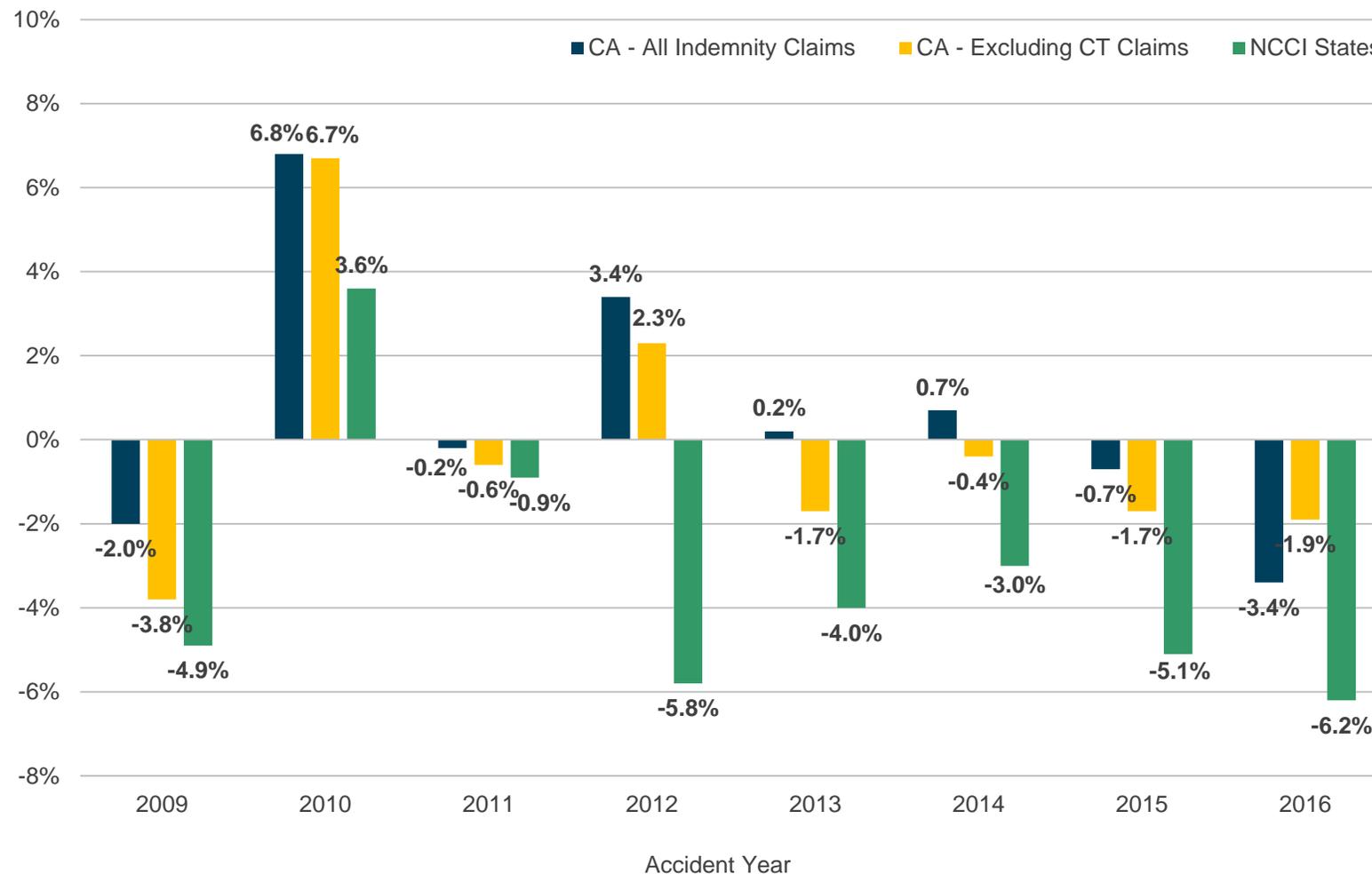




Chart 56

- Almost 25% of permanent partial disability claims involve CT.
- California permanent partial disability rates are still much higher than those for other states after excluding CT claims.

Permanent Partial Claims per 100,000 Employees

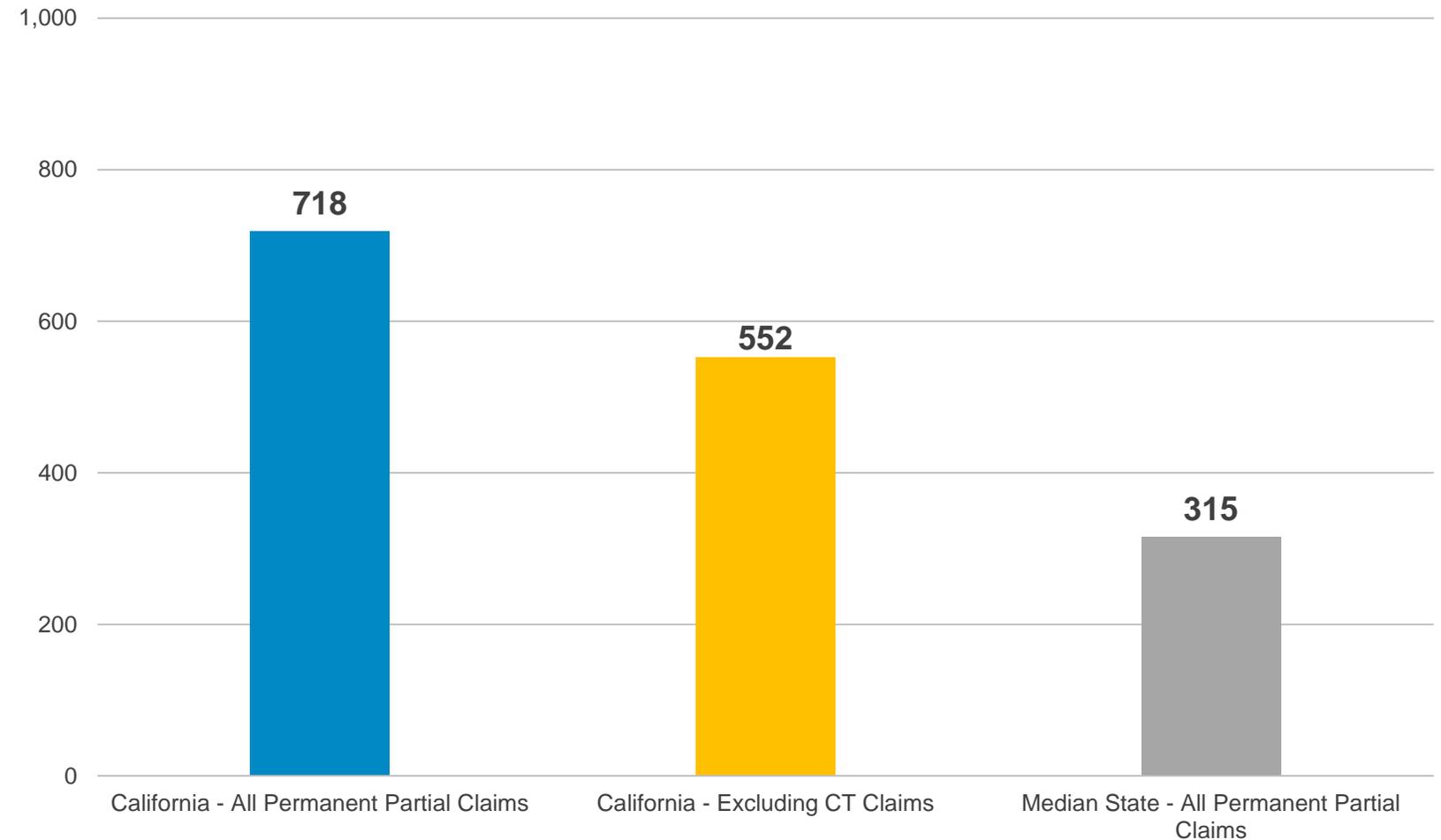




Chart 57

- CT claims develop much more slowly than specific injury claims as many CT claims are reported later.
- The rate of loss payments on CT claims is about twice as slow as the rate for specific injury claims.

Indemnity Age-to-Age Development

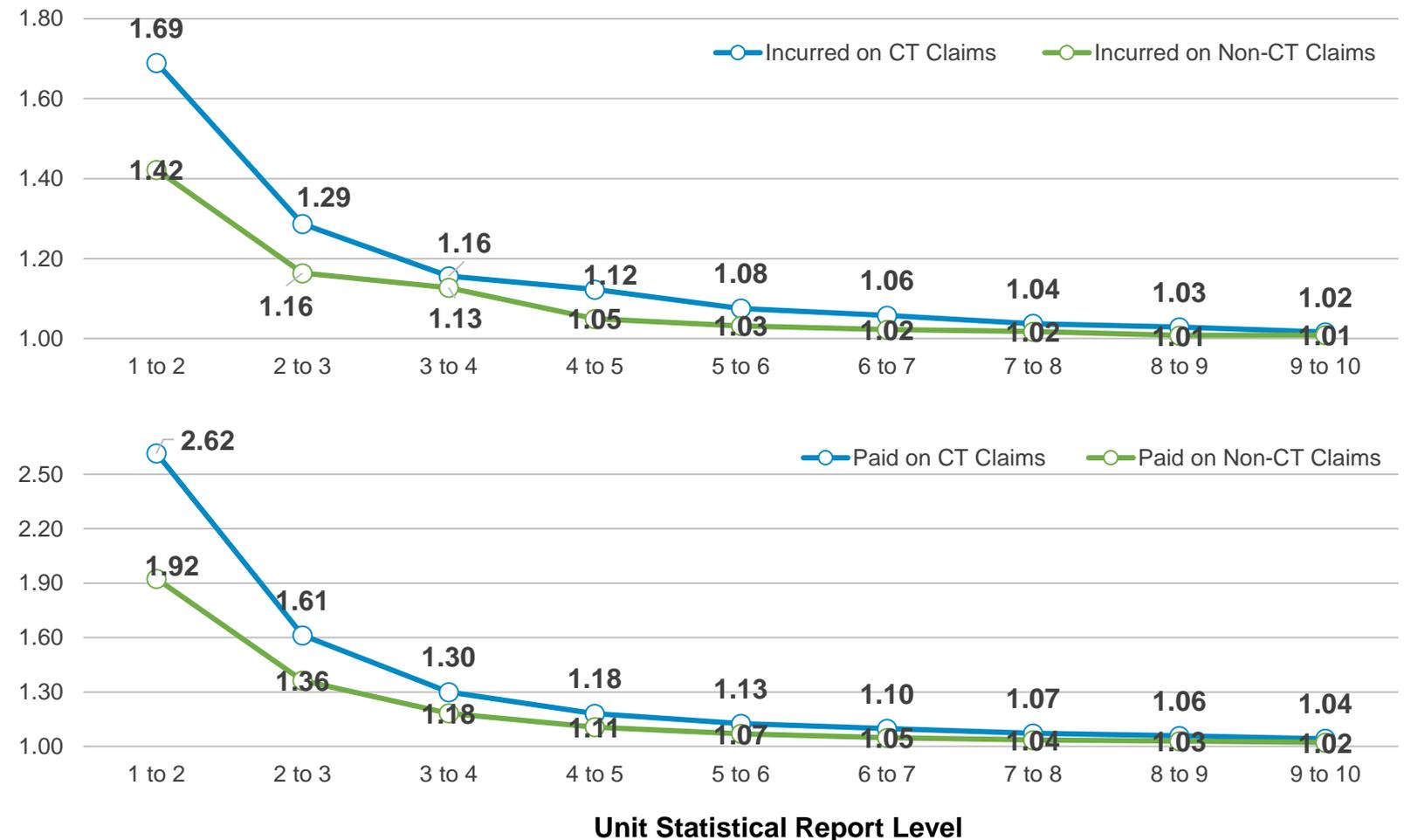




Chart 58

- CT claims develop much more slowly than specific injury claims as many CT claims are reported later.
- Less than 10% of ultimate medical costs on CT claims is paid by 18 months.

Medical Age-to-Age Development

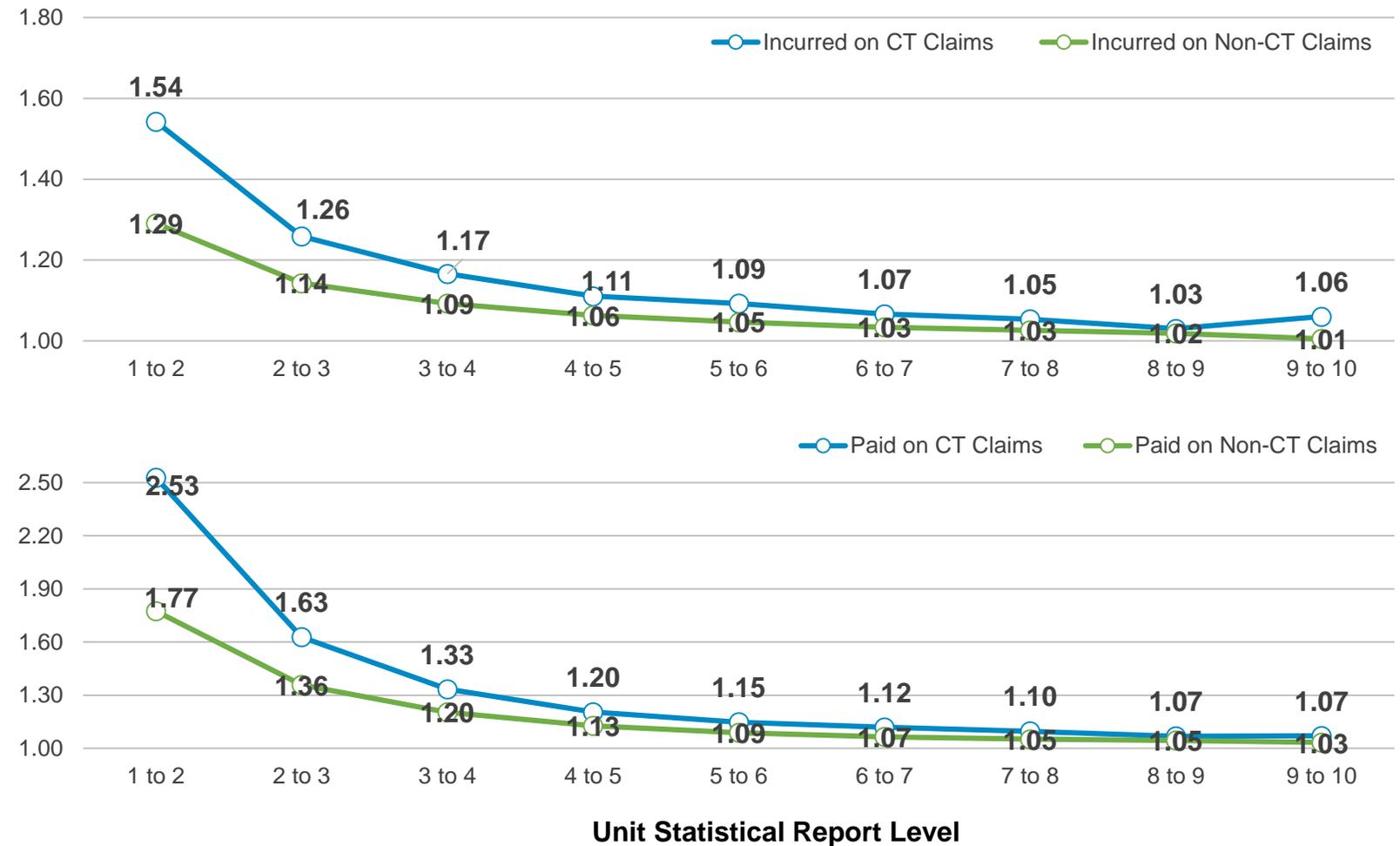




Chart 59

- ALAE payments on CT claims also emerge slower than for specific injury claims but the differences are not as significant as are the differences in loss payment patterns.

ALAE Age-to-Age Development

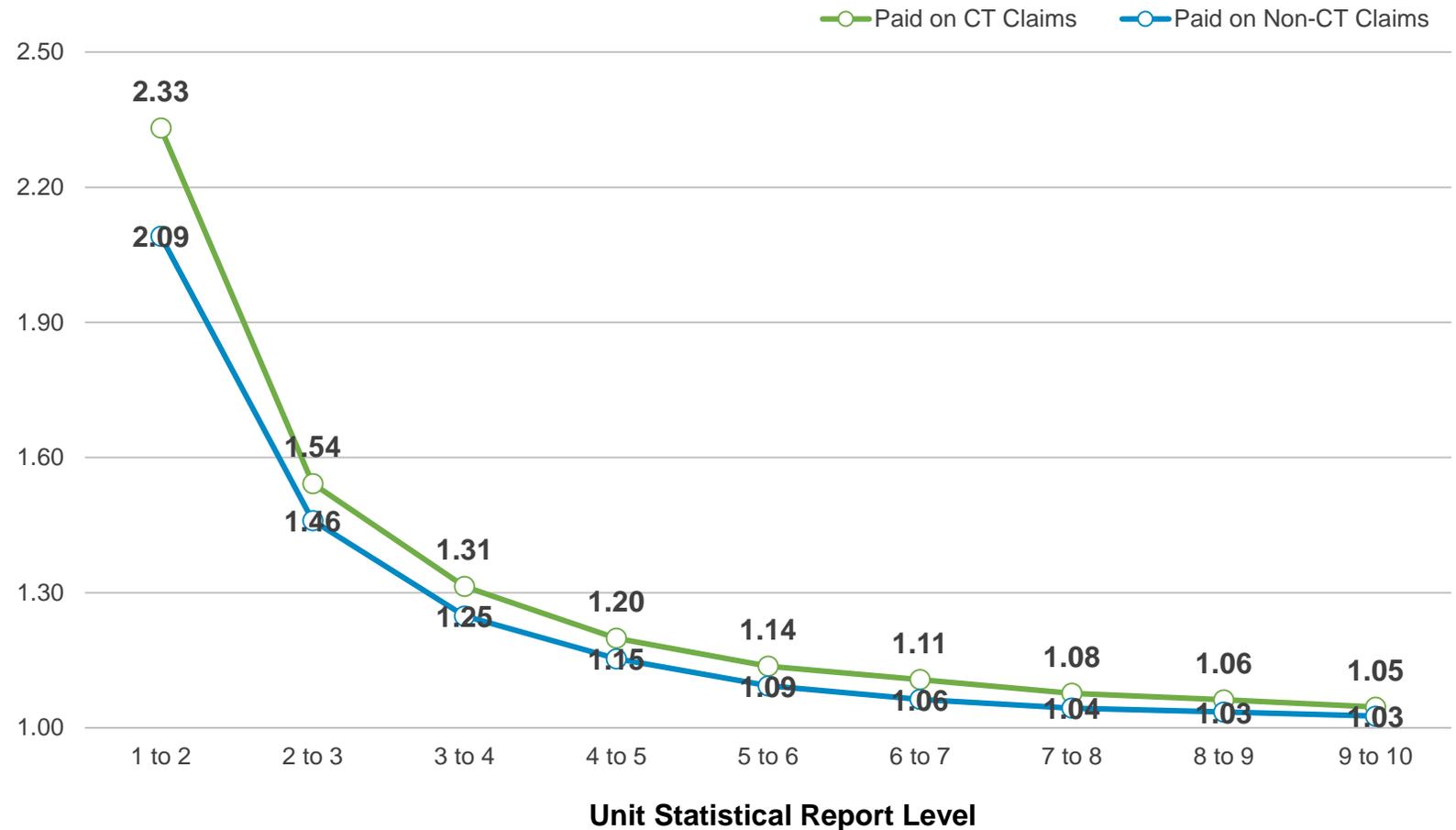




Chart 60

- Initially at 18 months, average CT claim and specific claim indemnity costs are similar.
- A number of CT claims are initially reported as a medical-only claim with the indemnity benefits paid on an associated claim.
- CT claims develop much higher than specific injury claims and on average have higher indemnity costs at later maturities.

Indemnity Severity Development Comparison

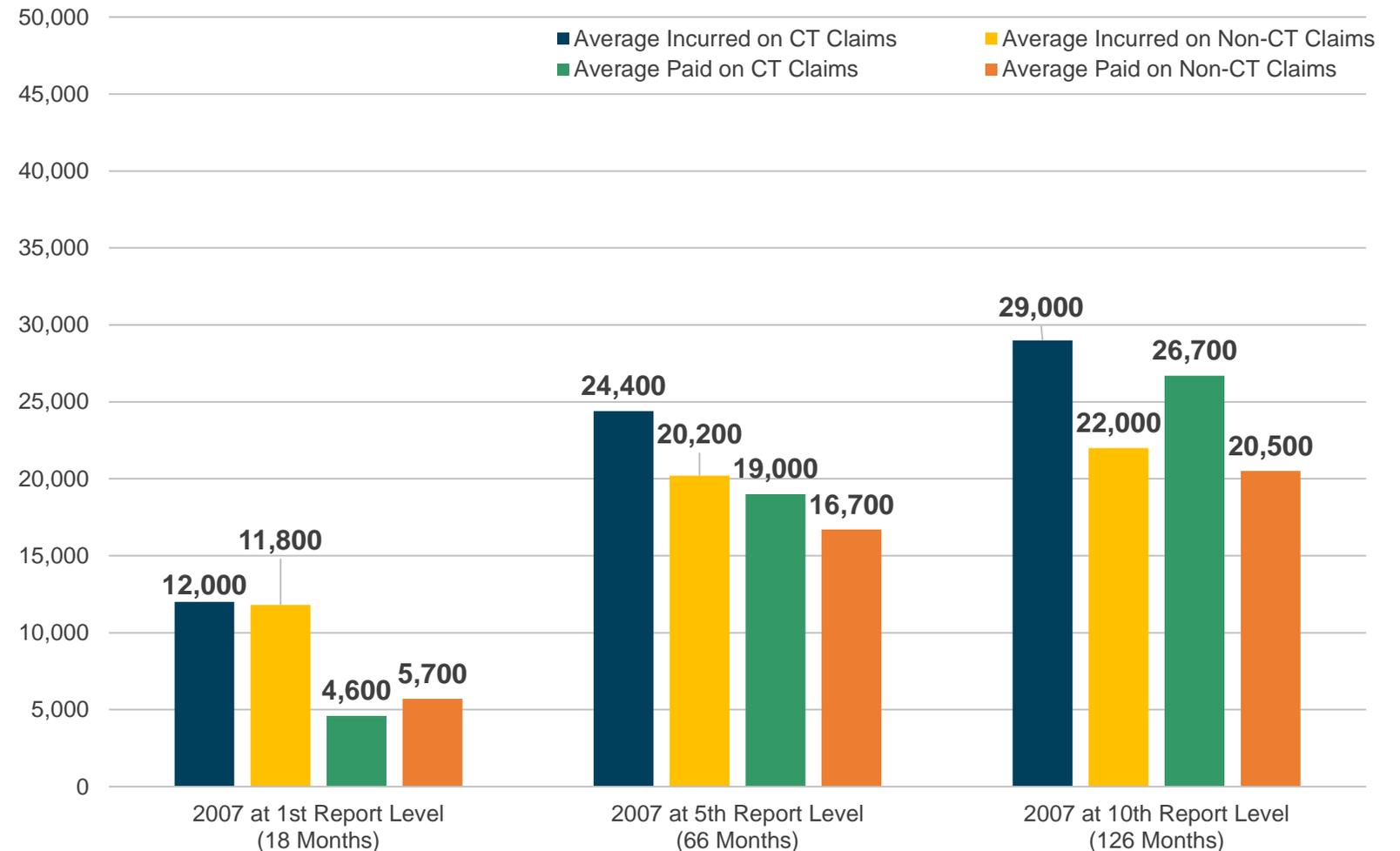




Chart 61

- Since CT claims generally start smaller and then develop higher than specific injury claims, the impact of recent CT claim growth on trends in average indemnity costs has been small.

Change in Indemnity per Indemnity Claim

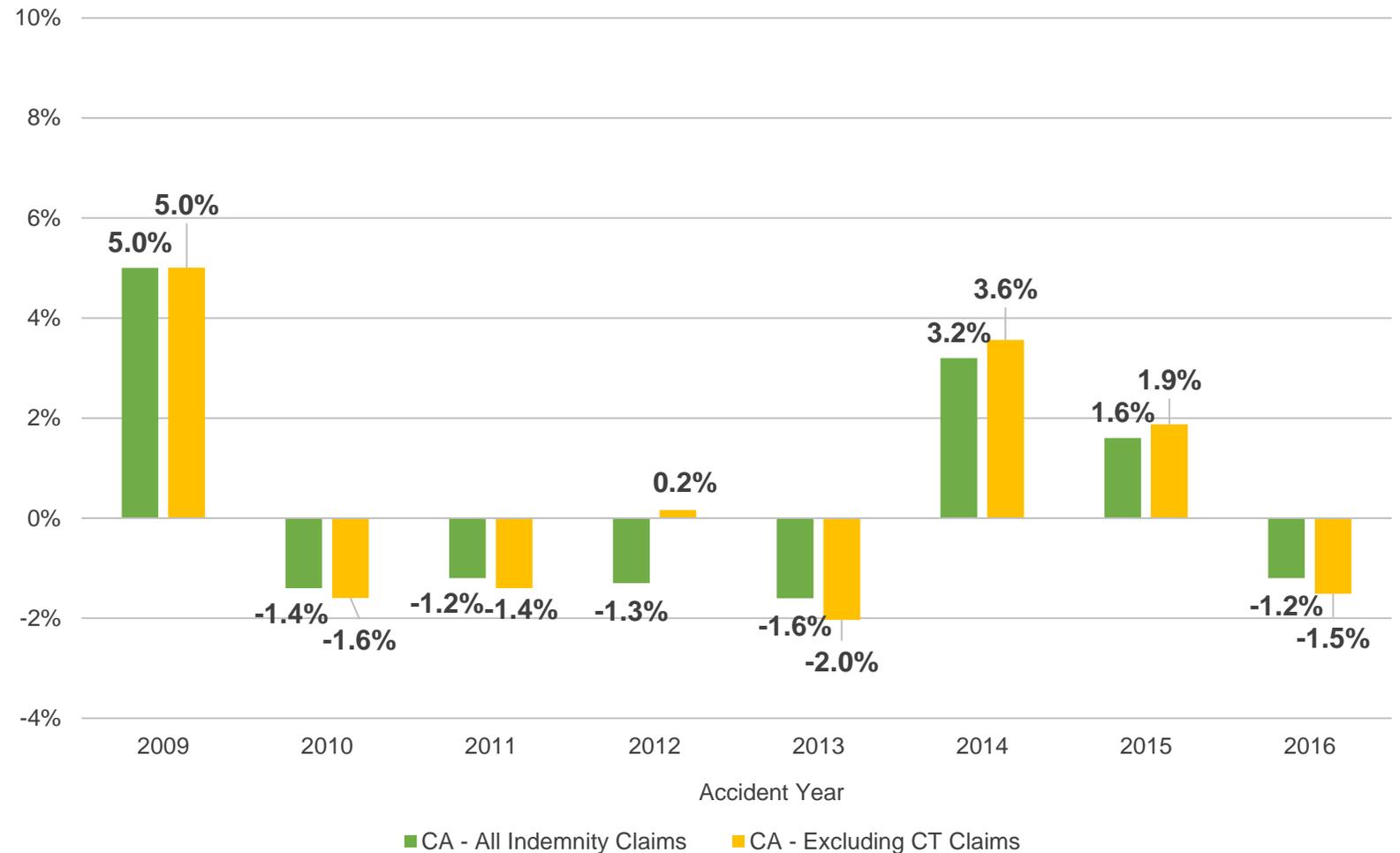




Chart 62

- Initially at 18 months, average CT claim medical costs are lower than those for specific injury claims.
- CT claim medical costs develop much higher than for specific injury claims and are on average 15% more expensive by 126 months.

Summary
of Key Findings

More Info

Medical Severity Development Comparison

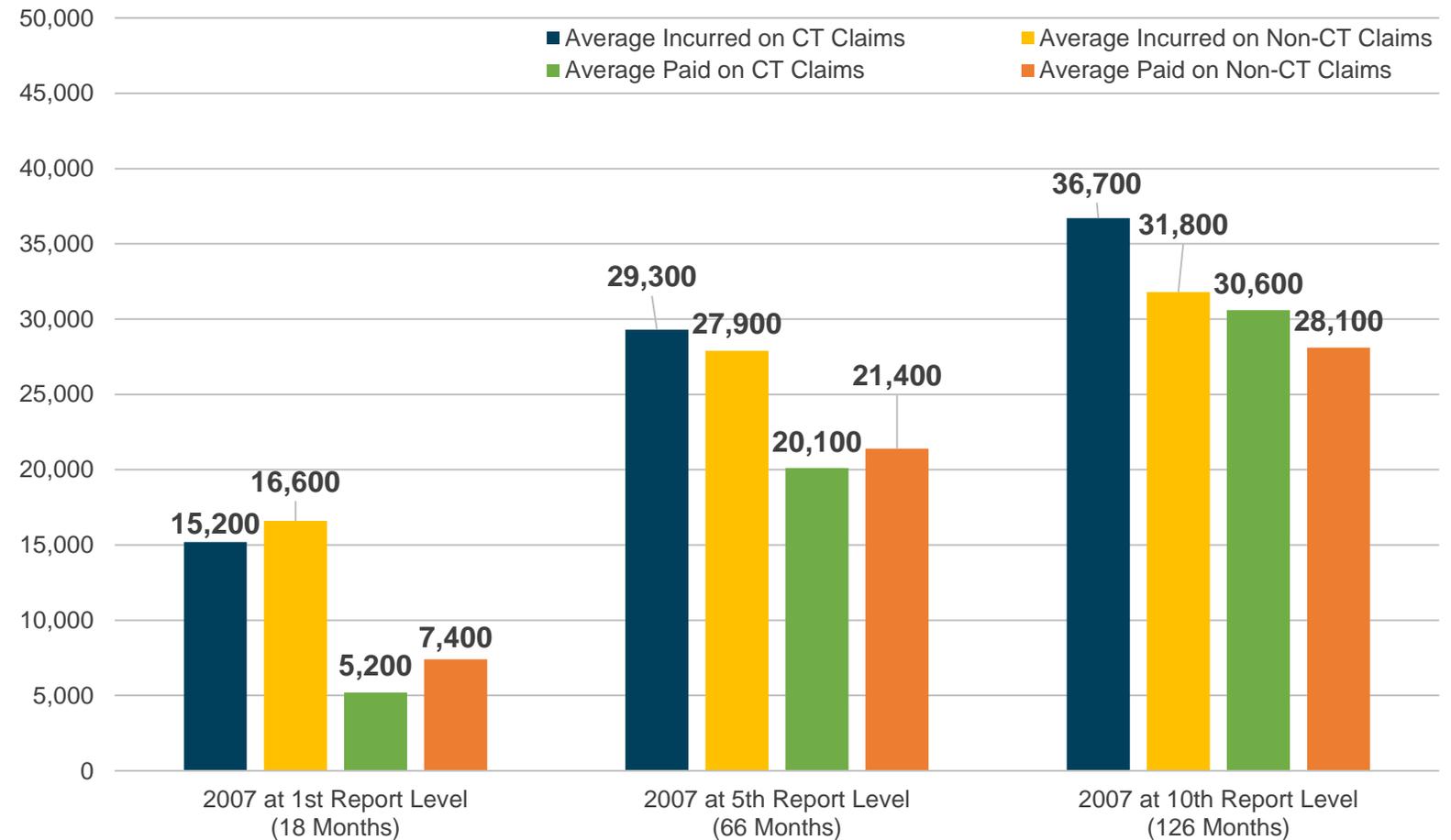




Chart 63

- Since CT claims generally start smaller and develop higher than specific injury claims, the impact of recent CT claim growth on trends in average medical costs has been small.
- Since CT claims are paid slower than specific injury claims, they potentially significantly impact loss development projections.

Change in Medical per Indemnity Claim

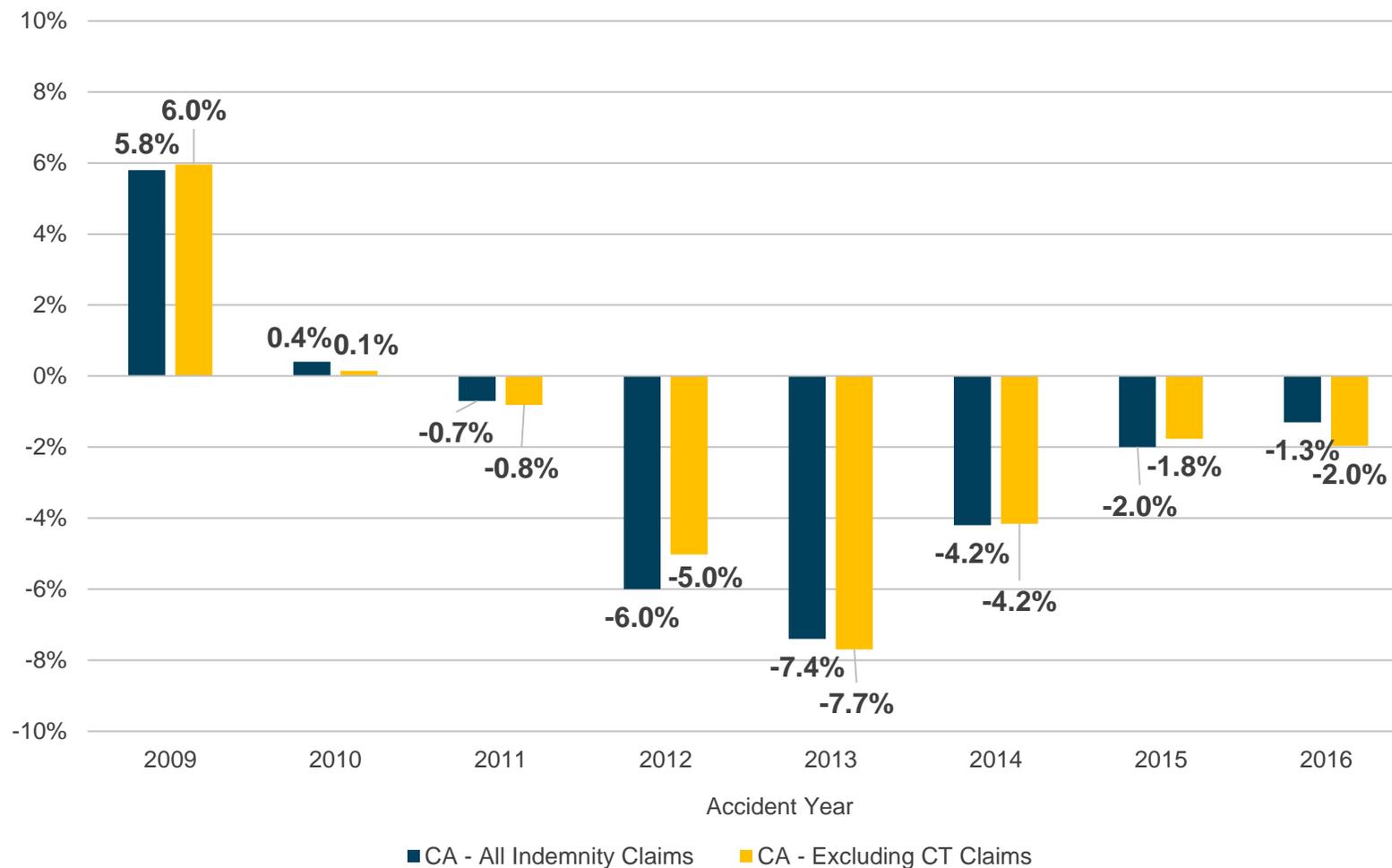




Chart 64

- CT claims on average incur 45% more ALAE costs than specific injury claims.
- Average ALAE costs continue to grow even after excluding CT claims.

Ultimate ALAE per Indemnity Claim

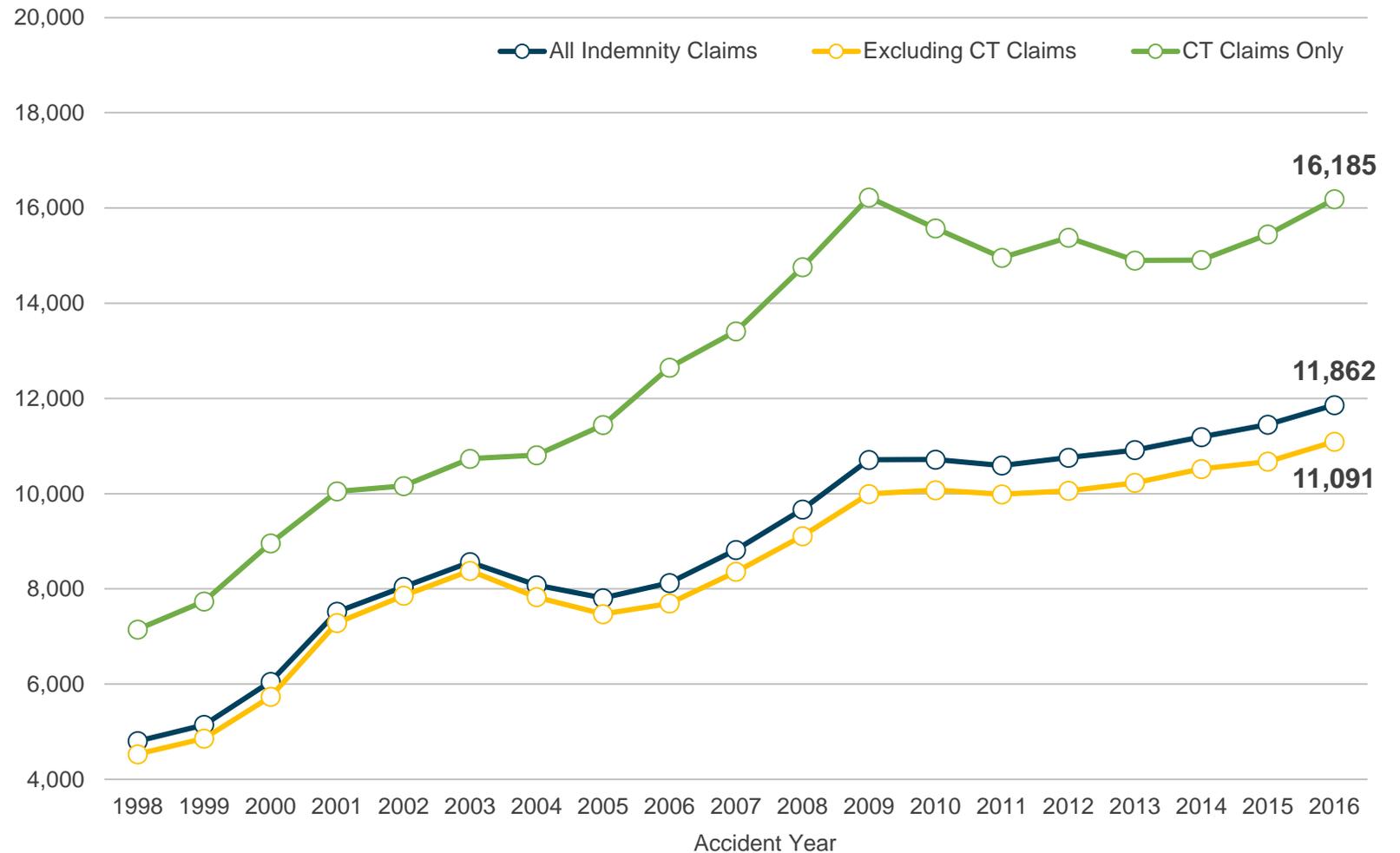




Chart 65

- CT claims have a greater prevalence of significant defense costs in addition to being more expensive on average.
- California claims are still highly litigated even after excluding CT claims and the proportion of claims with significant defense costs is well above the median state.

Percent of Claims with Significant Defense Costs

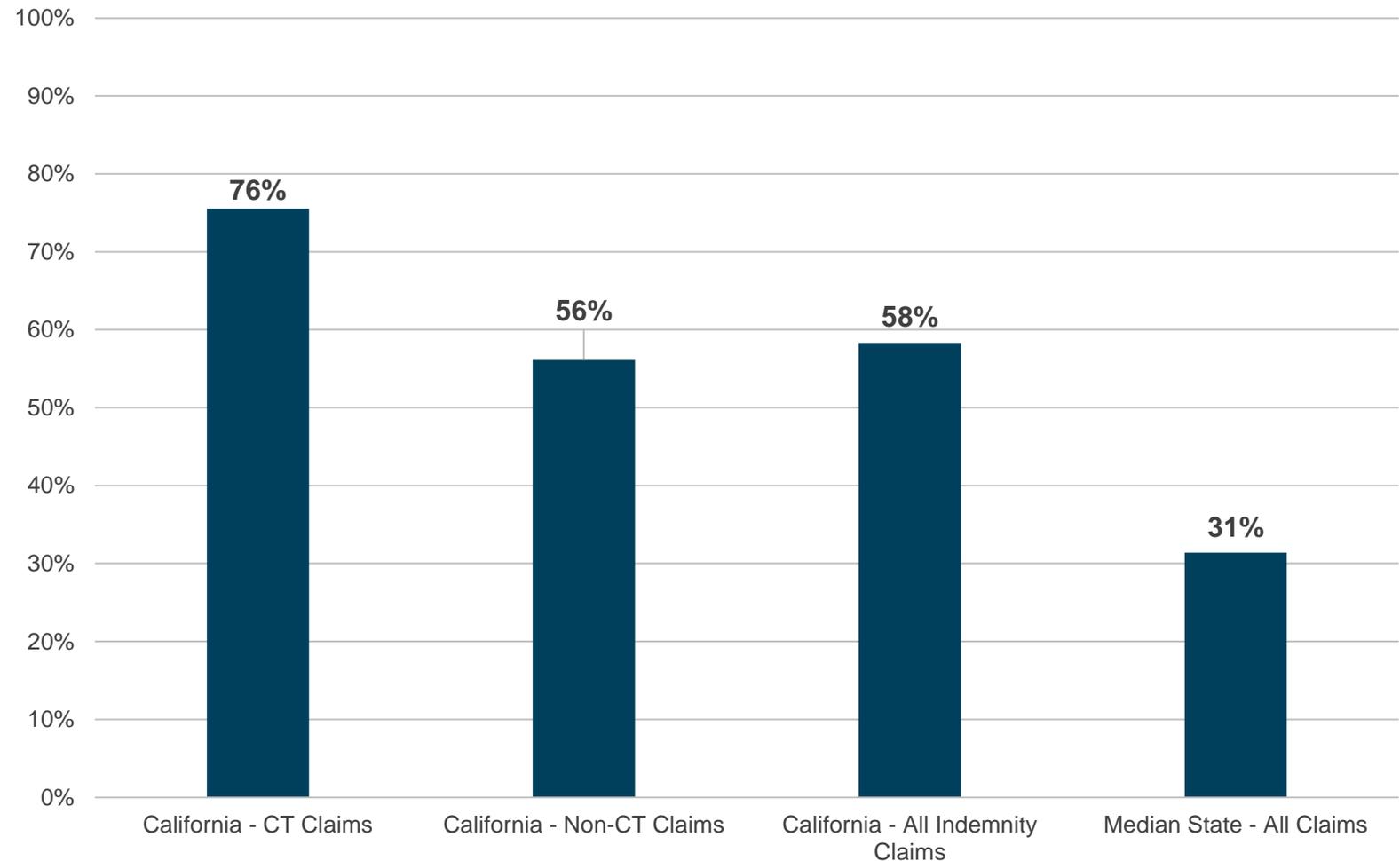
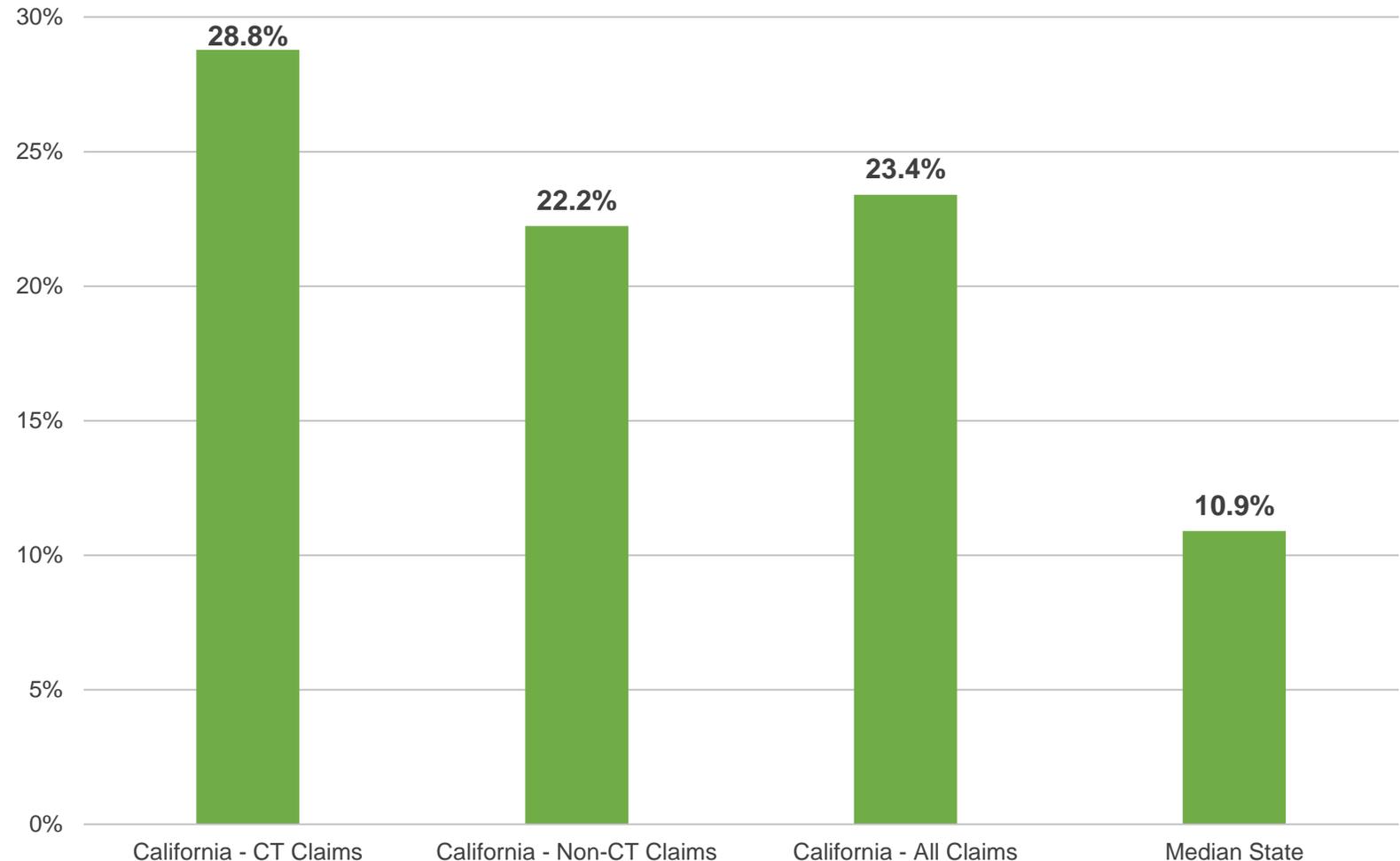




Chart 66

- CT claims add about 1 point to the California ALAE to loss ratio.
- Excluding CT claims does not move the California ALAE to loss ratio much closer to that for other states as significant ALAE costs are also incurred on other claims.
- ALAE costs for CT claims total approximately \$500 million in the insured system annually.

Ratios of ALAE to Loss



More Info



Chart 67

- CT claims close significantly slower than specific injury claims, with over 80% still open after 18 months.
- Recent acceleration in claim settlement rates have affected both CT and specific injury claims.

Percent of Claims Closed at 18 Months

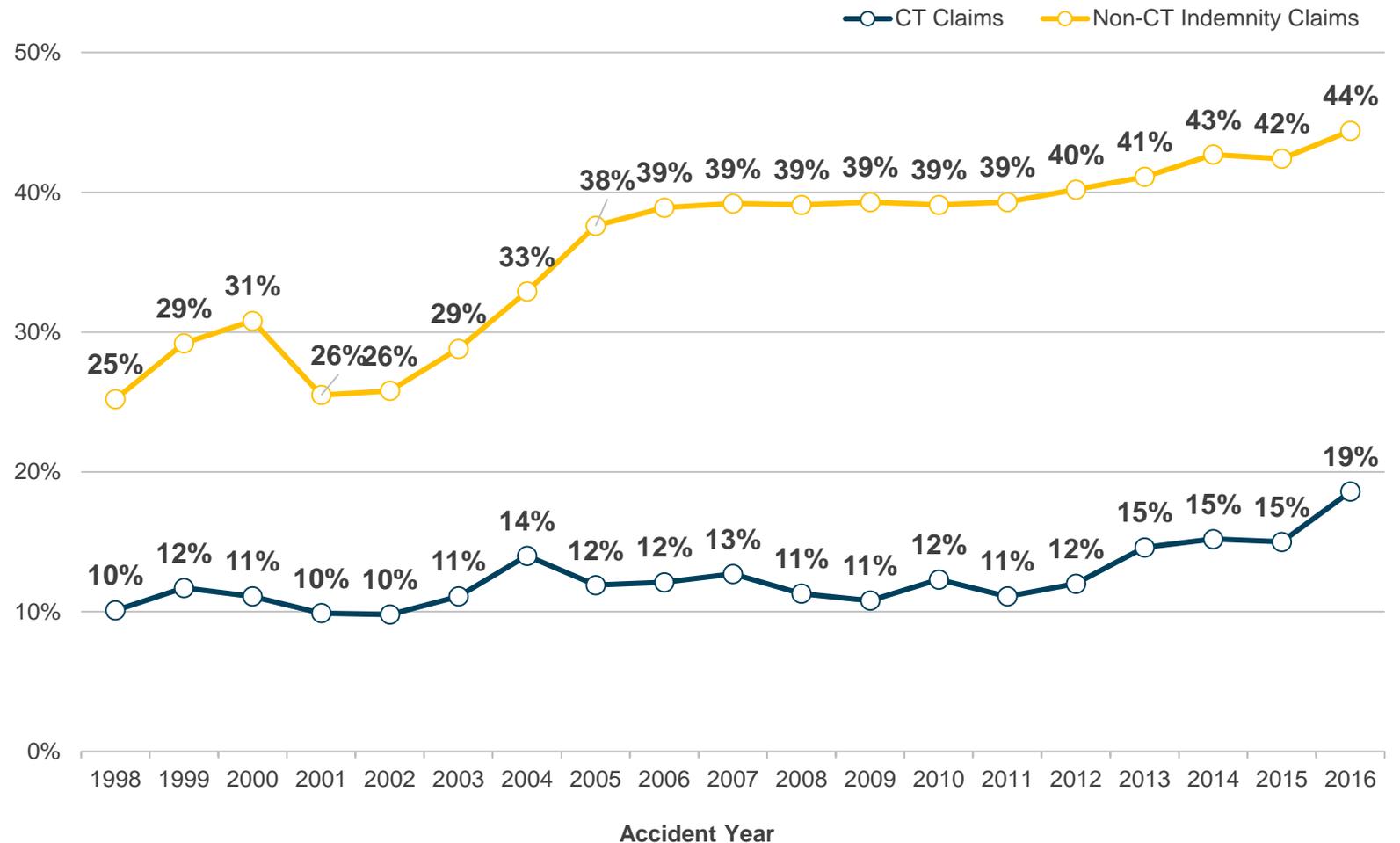




Chart 68

- After 5 years, over a quarter of CT claims are still open compared to half that rate for specific injury claims.
- California claim settlement rates are still significantly slower than those for other states after excluding CT claims.

Percent of Indemnity Claims Open at 60 Months

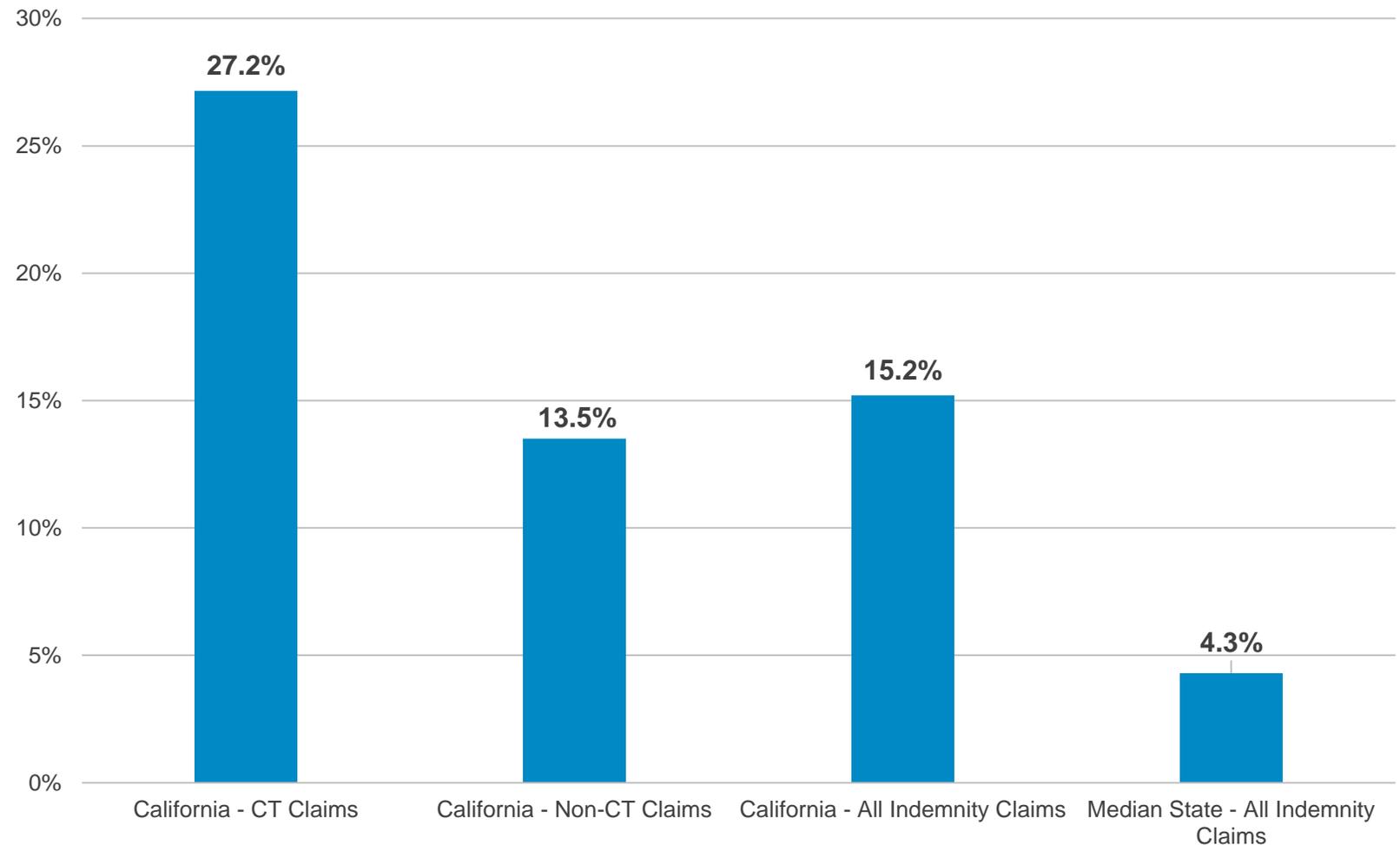
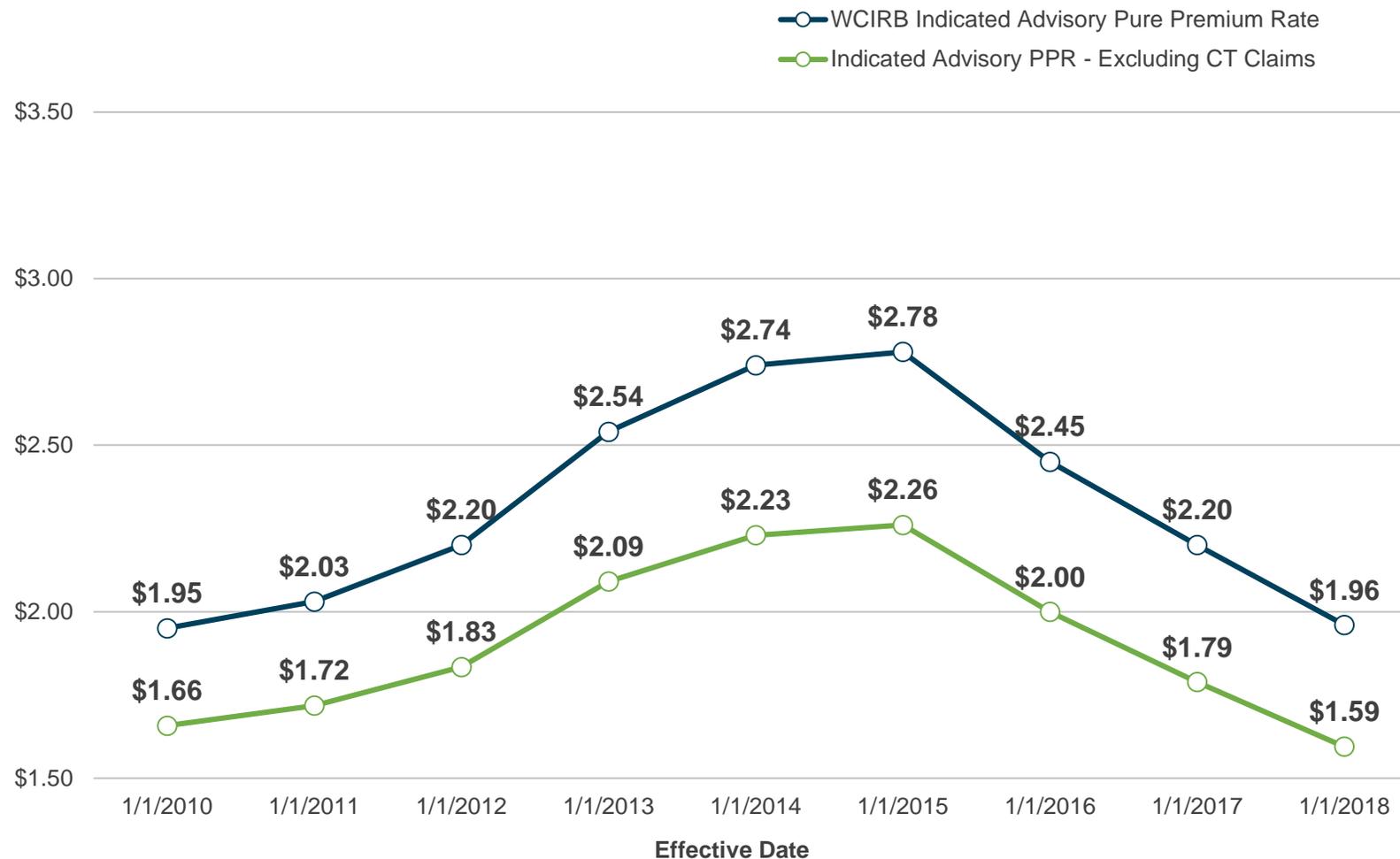




Chart 69

- Excluding all CT claims, average advisory pure premium rates are on average 19% lower.
- Recent increases and decreases in indicated average advisory pure premium rates are not significantly different after excluding CT claims.

Indicated Average Advisory Pure Premium Rates





More Info

Chart 1: Percent of Indemnity Claims that are CT

- Source: WCIRB unit statistical data. 2016 is preliminary and based on data from policies incepting in 2015.
- 1st report level represents claims evaluated 18 months after policy inception.
- Ultimate values are developed based on the average of the latest six years' age-to-age factors. Development after 10th report is assumed to be consistent with the latest reported age-to-age factor (9th to 10th).

Chart 2: Percent of Claims Unreported

- Source: WCIRB unit statistical data.
- Formula is $1.0 - \frac{\text{[Number of indemnity claims reported at that report level]}}{\text{[Estimated ultimate total number of indemnity claims]}}$.
- Values are based on the average over the latest six calendar periods.

Chart 3: Number of Years until 98% of Claims are Reported

- Source: WCIRB unit statistical data for California and information provided by the NCCI and other independent rating bureaus for the median state.
- Data is based on indemnity claims only.

Chart 4: Percent of Total Claims that are CT by Region

- Source: WCIRB unit statistical data for policy year 2015 at 1st report level. Includes medical only claims.

- Region information obtained by linking WCIRB unit statistical data with Hoover's/Dun and Bradstreet location information as well as WCIRB medical transaction data.
- The data is adjusted to remove differences in the mix of industries and average wage levels by region to show the figures on a comparable basis.

Chart 5: Percent of Indemnity Claims that are CT by Region

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The Bay Area includes Alameda, San Francisco, Contra Costa, San Mateo, Marin, Santa Clara, Napa, Solano and Sonoma counties.
- The Los Angeles Basin Area includes Los Angeles, Orange, Ventura, San Bernardino and Riverside counties.

Chart 6: Distribution of Indemnity Claims by Industry – Policy Year 2008

- Source: WCIRB unit statistical data at 1st report level.

Chart 7: Distribution of Indemnity Claims by Industry – Policy Year 2015

- Source: WCIRB unit statistical data at 1st report level.



More Info (...continued)

Chart 8: CT Claims by Industry and Region – Agriculture & Mining

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Agriculture and Mining sector represents classification codes assigned to NAICS Sectors 11 and 21.

Chart 9: CT Claims by Industry and Region – Construction

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Construction sector represents classification codes assigned to NAICS Sector 23.

Chart 10: CT Claims by Industry and Region – Manufacturing

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Manufacturing sector represents classification codes assigned to NAICS Sectors 31-33.

Chart 11: CT Claims by Industry and Region – Wholesale and Retail Trade

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Wholesale and Retail Trade sector represents classification codes assigned to NAICS Sectors 42, 44 and 45.



More Info (...continued)

Chart 12: CT Claims by Industry and Region – Utilities, Transportation & Warehousing, and Public Admin

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Utilities, Transportation & Warehousing, and Public Admin sector represents classification codes assigned to NAICS Sectors 22, 48-49, and 92.

Chart 13: CT Claims by Industry and Region – Information

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Information sector represents classification codes assigned to NAICS Sector 51.

Chart 14: CT Claims by Industry and Region – Finance & Insurance

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Finance & Insurance sector represents classification codes assigned to NAICS Sector 52.

Chart 15: CT Claims by Industry and Region – Real Estate

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Real Estate sector represents classification codes assigned to NAICS Sector 53.



More Info (...continued)

Chart 16: CT Claims by Industry and Region – Professional Services

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Professional Services sector represents classification codes assigned to NAICS Sector 54.

Chart 17: CT Claims by Industry and Region – Administrative

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Administrative sector represents classification codes assigned to NAICS Sector 56.

Chart 18: CT Claims by Industry and Region – Education

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Education sector represents classification codes assigned to NAICS Sector 61.

Chart 19: CT Claims by Industry and Region – Health

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Health sector represents classification codes assigned to NAICS Sector 62.



More Info (...continued)

Chart 20: CT Claims by Industry and Region – Arts & Entertainment

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Arts & Entertainment sector represents classification codes assigned to NAICS Sector 71.

Chart 21: CT Claims by Industry and Region – Hospitality

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Hospitality sector represents classification codes assigned to NAICS Sector 72.

Chart 22: CT Claims by Industry and Region – Other Services

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Other Services sector represents classification codes assigned to NAICS Sector 81.

Chart 23: CT Claims by Industry and Region – Outside Sales & Clerical

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- The upper graph shows the proportion of total indemnity claims by region for this industry. The lower graph shows the ratio of CT claim counts to total indemnity claim counts within the region and industry.
- Outside Sales & Clerical sector represents Classifications 8742 and 8810.



More Info (...continued)

Chart 24: Percent of CT Claims by Average Weekly Wage

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Region is based on the zip code reported on the California workers' compensation policy.
- Wage is based on the average weekly wage of the injured worker at the time of injury.

Chart 25: Percent of CT Claims by Industry and Average Weekly Wage

- Source: WCIRB unit statistical data at 1st report level. 2016 is preliminary and based on data from policies incepting in 2015.
- Data is from the Los Angeles Basin and San Diego areas only, based on the zip code reported on the California workers' compensation policy.
- Wage is based on the average weekly wage of the injured worker at the time of injury.
- Hospitality sector represents classification codes assigned to NAICS Sector 72.

Chart 26: Distribution of Indemnity Claims in Los Angeles and San Diego by Wage Level and Industry

- Source: WCIRB unit statistical data at 1st report level for policy year 2015.

- Region is based on the zip code reported on the California workers' compensation policy.
- The two sectors shown represent the sectors with the largest volume of CT claim growth over the recent period.

Chart 27: Characteristics of Surveyed CT Claims

- Source: WCIRB special claim surveys (for 2012, 2014 and 2015) and WCIRB Permanent Disability Claim Survey for 2017.
- Each survey includes a different mix of accident years with claims aged approximately 1 to 2 years.
- Figures shown represent the total proportion of surveyed claims involving that component.

Chart 28: Post-Survey CT Claim Development – Post-Termination Claims for Accident Years 2012-2014

- Source: WCIRB special claim surveys and unit statistical data.
- The initial evaluation at “survey level” is 2nd report level or 30 months after policy inception. The later evaluation is the most recent for that accident year and between 3rd and 5th report levels or 42 to 66 months after policy inception (average of 54 months).
- Incurred and paid figures include both indemnity and medical losses.



More Info (...continued)

Chart 29: Post-Survey CT Claim Development – Denied Claims for Accident Years 2012-2014

- Source: WCIRB special claim surveys and unit statistical data.
- The initial evaluation at “survey level” is 2nd report level or 30 months after policy inception. The later evaluation is the most recent for that accident year and between 3rd and 5th report levels or 42 to 66 months after policy inception (average of 54 months).
- Incurred and paid figures include both indemnity and medical losses.

Chart 30: Post-Survey CT Claim Development – Claims with Specific Component for Accident Years 2012-2014

- Source: WCIRB special claim surveys and unit statistical data.
- Shows information on CT claims that have an associated specific injury claim filed for the same claimant.
- The initial evaluation at “survey level” is 2nd report level or 30 months after policy inception. The later evaluation is the most recent for that accident year and between 3rd and 5th report levels or 42 to 66 months after policy inception (average of 54 months).
- Incurred and paid figures include both indemnity and medical losses.

Chart 31: Post-Survey CT Claim Development – Claims with Specific Component for Accident Years 2007-2010

- Source: WCIRB special claim surveys and unit statistical data.
- Shows information on CT claims that have an associated specific injury claim filed for the same claimant.
- The initial evaluation at “survey level” is 1st report level or 18 months after policy inception. The later evaluation is the most recent for that accident year and between 7th and 9th report levels or 90 to 114 months after policy inception (average of 102 months).
- Incurred and paid figures include both indemnity and medical losses.

Chart 32: Post-Survey CT Claim Development – Represented Claims for Accident Years 2012-2014

- Source: WCIRB special claim surveys and unit statistical data.
- Shows information on CT claims that involve representation for the injured worker.
- The initial evaluation at “survey level” is 2nd report level or 30 months after policy inception. The later evaluation is the most recent for that accident year and between 3rd and 5th report levels or 42 to 66 months after policy inception (average of 54 months).
- Incurred and paid figures include both indemnity and medical losses.



More Info (...continued)

Chart 33: Post-Survey CT Claim Development – Represented Claims for Accident Years 2007-2010

- Source: WCIRB special claim surveys and unit statistical data.
- Shows information on CT claims that involve representation for the injured worker.
- The initial evaluation at “survey level” is 1st report level or 18 months after policy inception. The later evaluation is the most recent for that accident year and between 7th and 9th report levels or 90 to 114 months after policy inception (average of 102 months).
- Incurred and paid figures include both indemnity and medical losses.

Chart 34: Additional Characteristics of Surveyed Claims

- Source: WCIRB Permanent Disability Claim Survey for accident years 2014 and 2015.
- Surveyed claims are aged approximately 33 to 45 months.

Chart 35: Average Applicant’s Legal Costs

- Source: WCIRB Permanent Disability Claim Survey for accident years 2014 and 2015.
- Surveyed claims are aged approximately 33 to 45 months.
- Applicant’s legal costs include fees paid to applicant attorneys and expert testimony made on behalf of the applicant.

Chart 36: Medical Services Paid on CT Claims as a Percentage of Total Paid

- Source: WCIRB medical transaction data for the 2013 to 2016 payment years.
- Each figure shows the percentage of all payments made for the medical service component during the time period that came from CT claims.

Chart 37: Medical-Legal Cost Trends

- Source: WCIRB medical transaction data.
- Percentages are based on claims with any medical service that had a medical-legal report and includes medical only claims.

Chart 38: Lien Filings for 2013 through 2016

- Source: WCIRB medical transaction data and unit statistical data at 1st report level for transactions in 2013 through 2016. Lien filing information based on data from the Division of Workers’ Compensation.



More Info (...continued)

Chart 39: Top Seven Medical Diagnoses

- Source: WCIRB medical transaction data for the 2013 to 2016 payment years.
- Diagnoses based on the primary ICD code reported on the medical transaction.

Chart 40 :Share of Total Medical Payments by Service Type – Accident Years 2013 to 2016 at 1st Development Year

- Source: WCIRB medical transaction data for payments made within the first year of the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.
- HCPCS is the Healthcare Common Procedure Coding System and includes payments for durable medical equipment and other medical supplies.

Chart 41: Share of Total Medical Payments by Service Type – Accident Years 2009 to 2012 at 5th Development Year

- Source: WCIRB medical transaction data for payments made five years after the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.

- HCPCS is the Healthcare Common Procedure Coding System and includes payments for durable medical equipment and other medical supplies.

Chart 42: Share of Total Medical Payments by Service Type – Accident Years 2004 to 2007 at 10th Development Year

- Source: WCIRB medical transaction data for payments made ten years after the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.
- HCPCS is the Healthcare Common Procedure Coding System and includes payments for durable medical equipment and other medical supplies.

Chart 43: Share of Total Medical Payments by Provider Type – Accident Years 2013 to 2016 at 1st Development Year

- Source: WCIRB medical transaction data for payments made within the first year of the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.
- DME is durable medical equipment.
- ASC is ambulatory surgical center.



More Info (...continued)

Chart 44: Share of Total Medical Payments by Provider Type – Accident Years 2009 to 2012 at 5th Development Year

- Source: WCIRB medical transaction data for payments made five years after the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.
- DME is durable medical equipment.
- ASC is ambulatory surgical center.

Chart 45: Share of Total Medical Payments by Provider Type – Accident Years 2004 to 2007 at 10th Development Year

- Source: WCIRB medical transaction data for payments made ten years after the year of injury.
- Region is based on the zip code reported on the California workers' compensation policy.
- DME is durable medical equipment.
- ASC is ambulatory surgical center.

Chart 46: Share of Total Medical Services Paid by Age and Service Type – Physician Services

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for physician services in the specified payment year.

Chart 47: Share of Total Medical Services Paid by Age and Service Type – Inpatient Services

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for inpatient services in the specified payment year.



More Info (...continued)

Chart 48: Share of Total Medical Services Paid by Age and Service Type – Outpatient Services

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for outpatient services in the specified payment year.

Chart 49: Share of Total Medical Services Paid by Age and Service Type – Medical Supplies and Equipment (HCPCS)

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for medical supplies and equipment in the specified payment year.

Chart 50: Share of Total Medical Services Paid by Age and Service Type – Medical-Legal

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for medical-legal reports in the specified payment year.

Chart 51: Share of Total Medical Services Paid by Age and Service Type – Liens

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for medical liens in the specified payment year.



More Info (...continued)

Chart 52: Share of Total Medical Services Paid by Age and Service Type – Pharmaceuticals

- Source: WCIRB medical transaction data.
- Region is based on the zip code reported on the California workers' compensation policy.
- Each figure shows the percentage of all payments made on that group of claims (CT Claims – Los Angeles Basin, CT Claims – Other Regions, or Non-CT Claims) during the time period (based on years from the year of injury) that were for pharmaceuticals in the specified payment year.

Chart 53: Share of Total Pharmaceutical Paid by Dispensing Place

- Source: WCIRB medical transaction data by year of payment.
- Region is based on the zip code reported on the California workers' compensation policy.

Chart 54: Share of Total Pharmaceutical Paid by Drug Type

- Source: WCIRB medical transaction data by year of payment.
- Region is based on the zip code reported on the California workers' compensation policy.
- Controlled substances are Schedule I and II drugs and include opioids.

Chart 55: Change in Indemnity Claim Frequency

- Source: WCIRB unit statistical data. NCCI states information based on the 2018 State of the Line Guide.
- Frequency for California claims is based on indemnity claims per unit of payroll adjusted to a common wage level.

Chart 56: Permanent Partial Claims per 100,000 Employees

- Source: WCIRB unit statistical data. Median state information based on the 2017 NCCI Annual Statistical Bulletin.
- Permanent partial claims are claims where some form of permanent partial disability is estimated.

Chart 57: Indemnity Age-to-Age Development

- Source: WCIRB unit statistical data.
- Values are averages based the latest six years' age-to-age factors.

Chart 58: Medical Age-to-Age Development

- Source: WCIRB unit statistical data.
- Values are averages based the latest six years' age-to-age factors.



More Info (...continued)

Chart 59: ALAE Age-to-Age Development

- Source: WCIRB unit statistical data.
- Values are averages based the latest six years' age-to-age factors.

Chart 60: Indemnity Severity Development Comparison

- Source: WCIRB unit statistical data.

Chart 61: Change in Indemnity per Indemnity Claim

- Source: WCIRB unit statistical data and aggregate financial data.
- Values are projected to ultimate by the WCIRB.

Chart 62: Medical Severity Development Comparison

- Source: WCIRB unit statistical data for indemnity claims only.

Chart 63: Change in Medical per Indemnity Claim

- Source: WCIRB unit statistical data and aggregate financial data for indemnity claims only.
- Values are projected to ultimate by the WCIRB.

Chart 64: Ultimate ALAE per Indemnity Claim

- Source: WCIRB unit statistical data and aggregate financial data for indemnity claims only.
- Values are projected to ultimate by the WCIRB.

Chart 65: Percent of Claims with Significant Defense Costs

- Source: WCIRB unit statistical data for policy year 2013 at 2nd report level. Median state estimated based on information published by the Workers' Compensation Research Institute.
- "Significant defense costs" refers to claims with paid ALAE amounts greater than \$1,000.

Chart 66: Ratios of ALAE to Loss

- Source: WCIRB aggregate financial data, unit statistical data, and projections. Median state estimated based on the 2017 NCCI Annual Statistical Bulletin.

Chart 67: Percent of Claims Closed at 18 Months

- Source: WCIRB aggregate financial data, unit statistical data, and projections.
- Values shown are the number of indemnity claims closed at 18 months divided by the total estimated number of indemnity claims.



More Info (...continued)

Chart 68: Percent of Indemnity Claims Open at 60 Months

- Source: WCIRB aggregate financial data, unit statistical data, and projections. Median state based on information provided by the NCCI and other independent rating bureaus.
- Values shown are the number of indemnity claims open at 60 months divided by the total estimated number of indemnity claims.

Chart 69: Indicated Average Advisory Pure Premium Rates

- Source: WCIRB pure premium rate filings and unit statistical data.
- Rates are based on a common set of exposure weights by classification.
- Indicated average advisory pure premium rates excluding CT claims were estimated based on historical trends in CT claim frequency and average indemnity, medical, and ALAE costs from WCIRB unit statistical data, applied to the accident years that underlie each pure premium rate filing projection. No changes were made to the loss and ALAE projection methodologies or the assumptions underlying those methodologies that were included in the original pure premium rate filing.



Notice & Copyright

The *World of Cumulative Trauma Claims Report* (Report) was developed by the Workers' Compensation Insurance Rating Bureau of California (WCIRB) for the convenience of its users. The WCIRB has made reasonable efforts to ensure the accuracy of this Report. You must make an independent assessment regarding the use of this Report based upon your particular facts and circumstances.

© 2018 Workers' Compensation Insurance Rating Bureau of California. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, without limitation, photocopying and recording, or by any information storage or retrieval system without the prior written permission of the Workers' Compensation Insurance Rating Bureau of California (WCIRB), unless such copying is expressly permitted in this copyright notice or by federal copyright law. No copyright is claimed in the text of statutes and regulations quoted within this work.

Workers' Compensation Insurance Rating Bureau of California, WCIRB, WCIRB California, WCIRB Connect, WCIRB CompEssentials, X-Mod Direct, eSCAD, Comprehensive Risk Summary and the WCIRB California logo (WCIRB Marks) are registered trademarks or service marks of the WCIRB. WCIRB Marks may not be displayed or used in any manner without the WCIRB's prior written permission. Any permitted copying of this work must maintain any and all trademarks and/or service marks on all copies.

To seek permission to use any of the WCIRB Marks or any copyrighted material, please contact the WCIRB at customerservice@wcirb.com.

Workers' Compensation Insurance Rating Bureau of California

1221 Broadway, Suite 900
Oakland, CA 94612
888.CA.WCIRB (888.229.2472)