

WCIRB Actuarial Committee Meeting

September 4, 2018

Agenda

1. AC18-09-01: 6/30/2018 Experience – Review of Methodologies
2. AC18-09-02: Cumulative Trauma Claim Study

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6/30/2018
Experience –
Review of
Methodologies

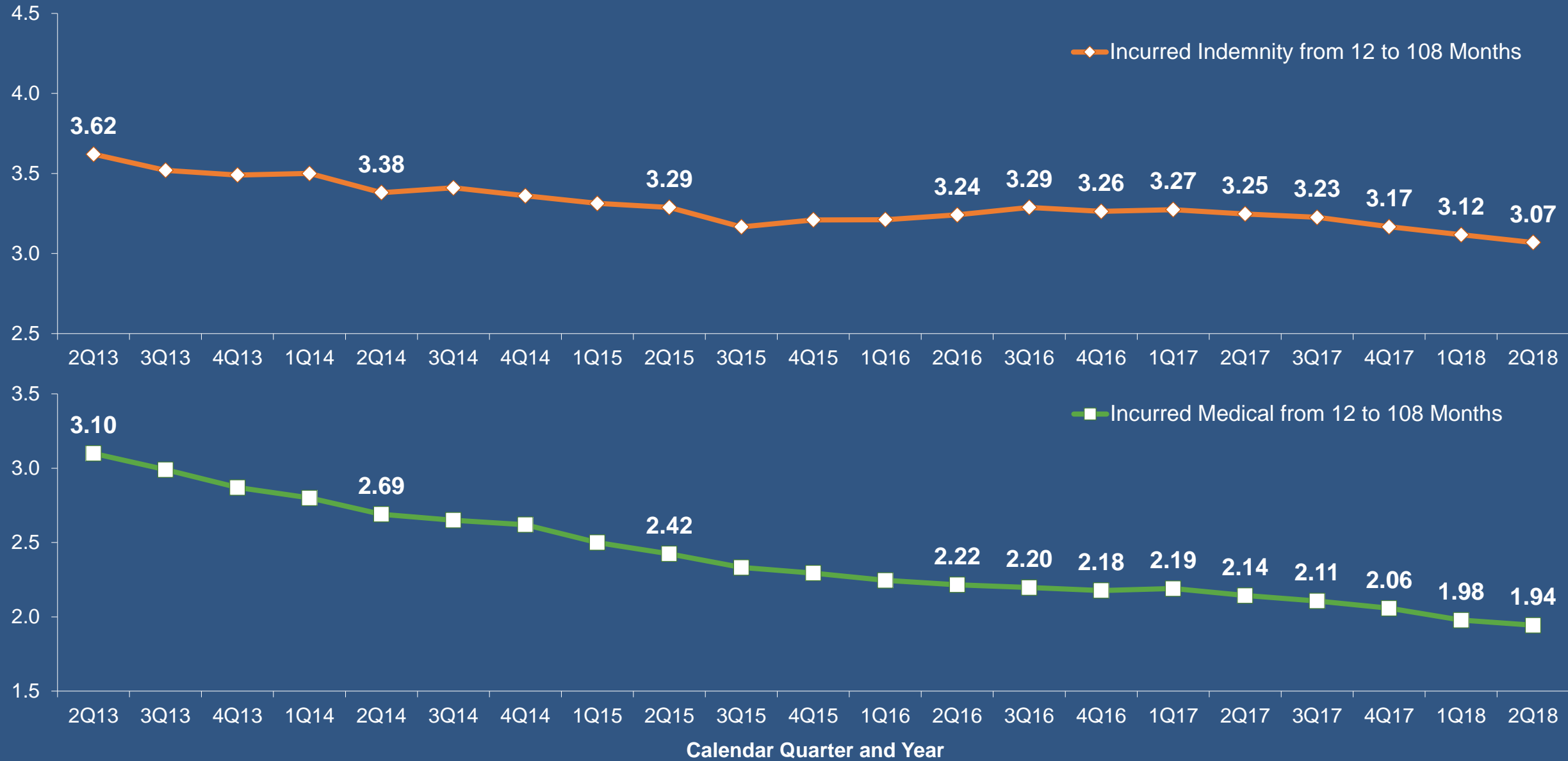


Summary of June 30, 2018 Experience

- Almost 100% of market reflected
- Same methodologies as in 1/1/2019 Filing
- Projected policy year 2019 loss ratio: 0.577
- 1 point decrease from 1/1/2019 Filing projection (0.588) driven by lower loss development

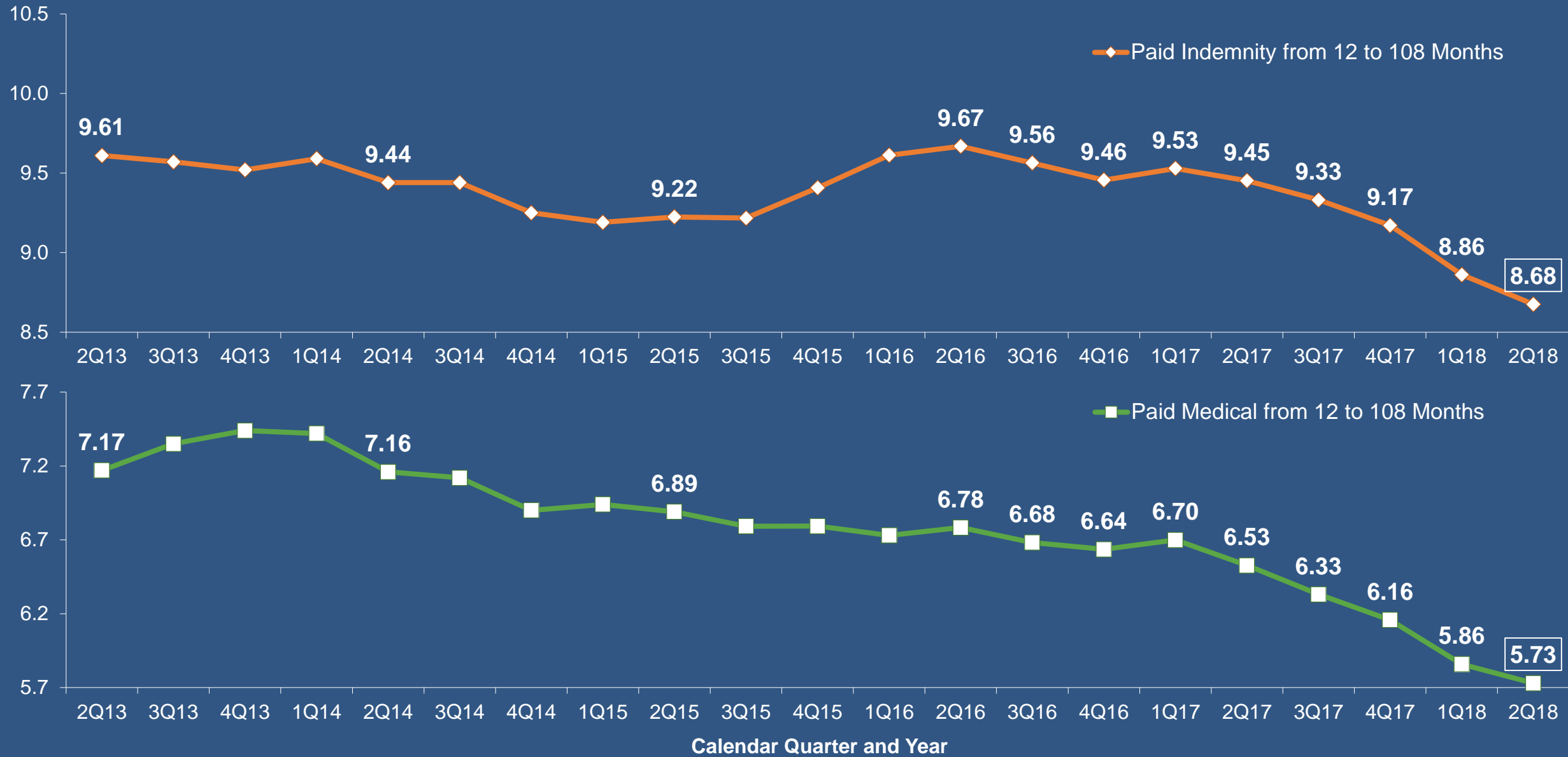
Cumulative Incurred Development from 12 to 108 Months

As of June 30, 2018



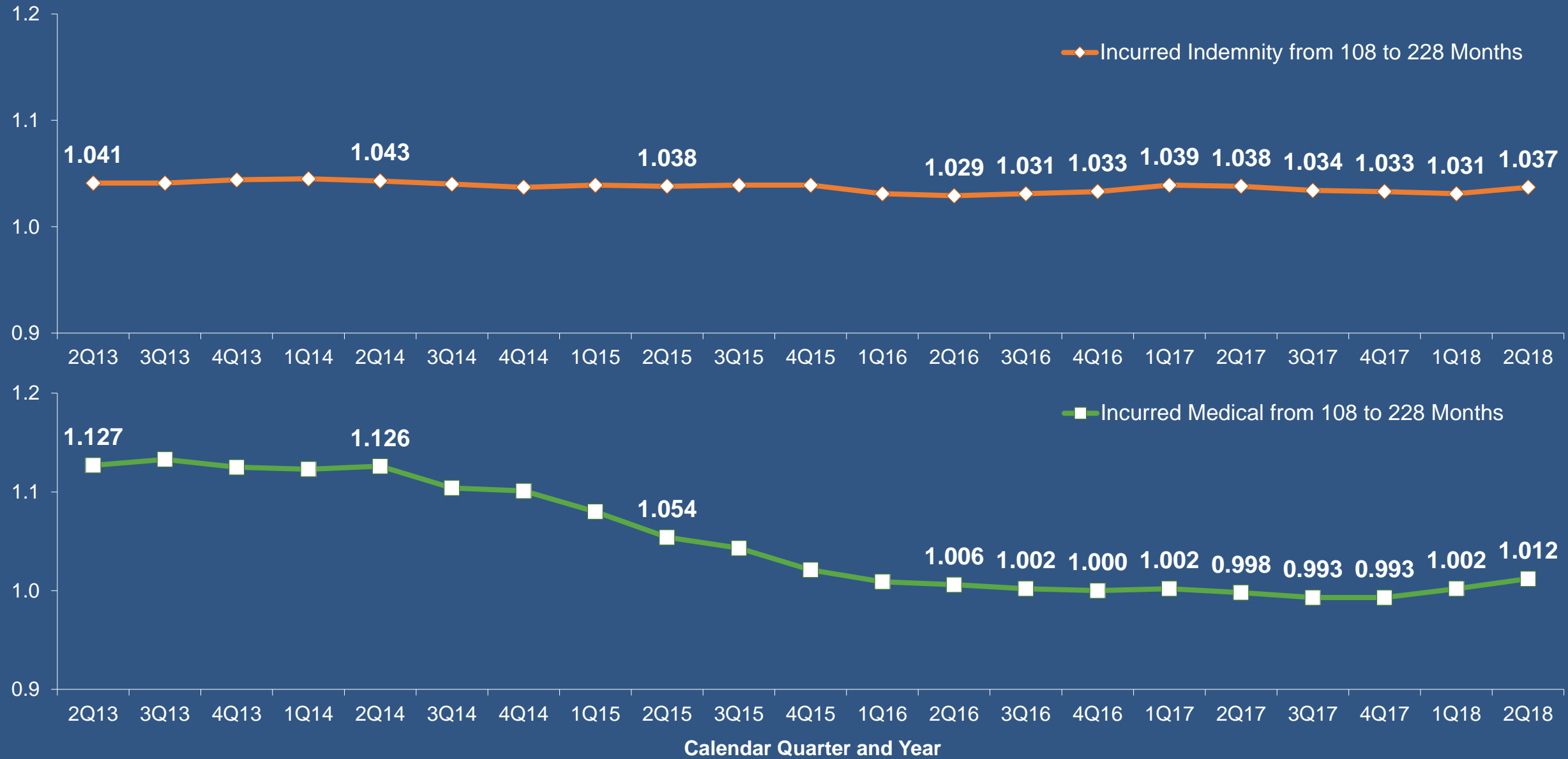
Cumulative Paid Development from 12 to 108 Months

As of June 30, 2018



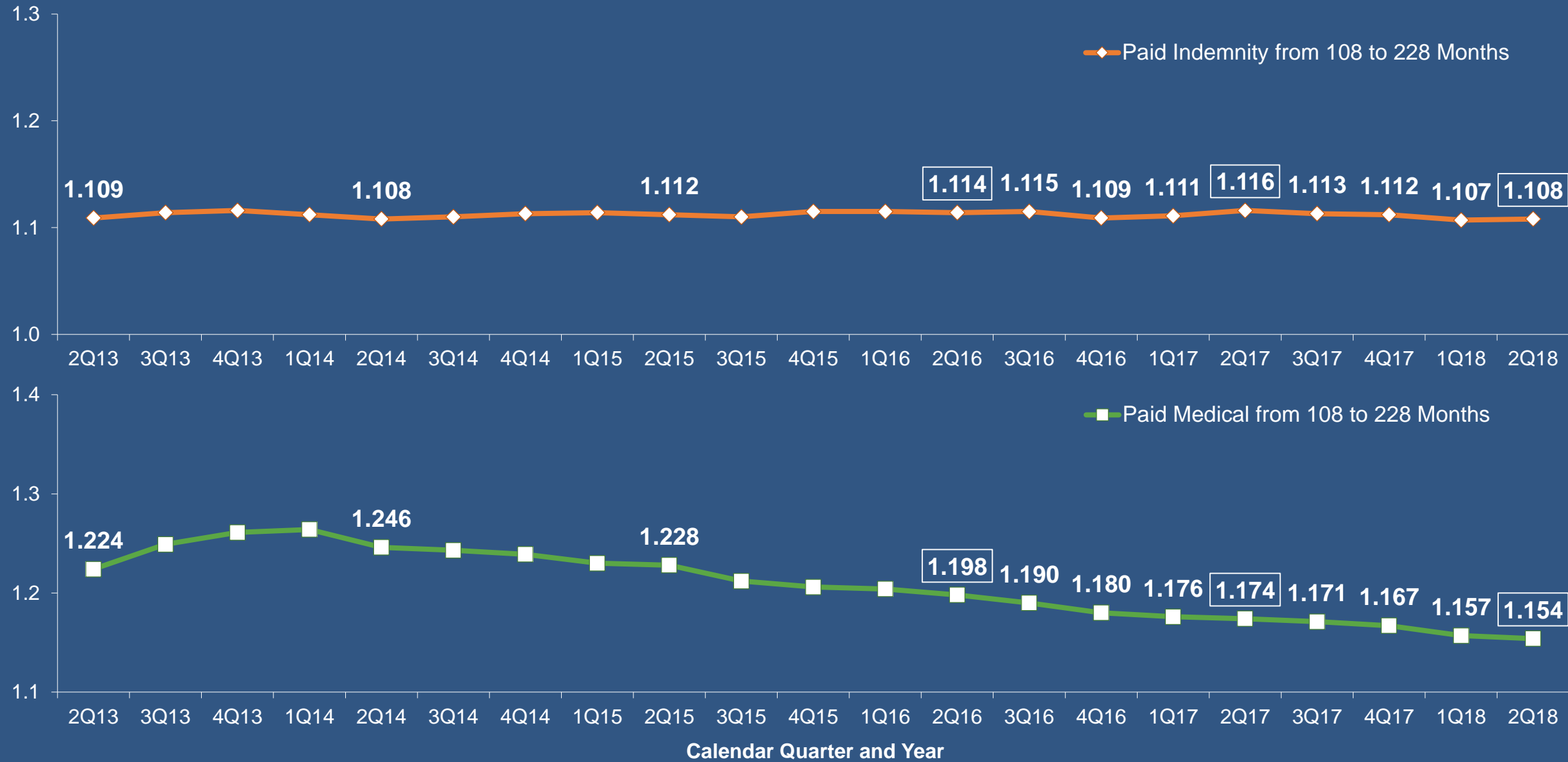
Cumulative Incurred Development from 108 to 228 Months

As of June 30, 2018



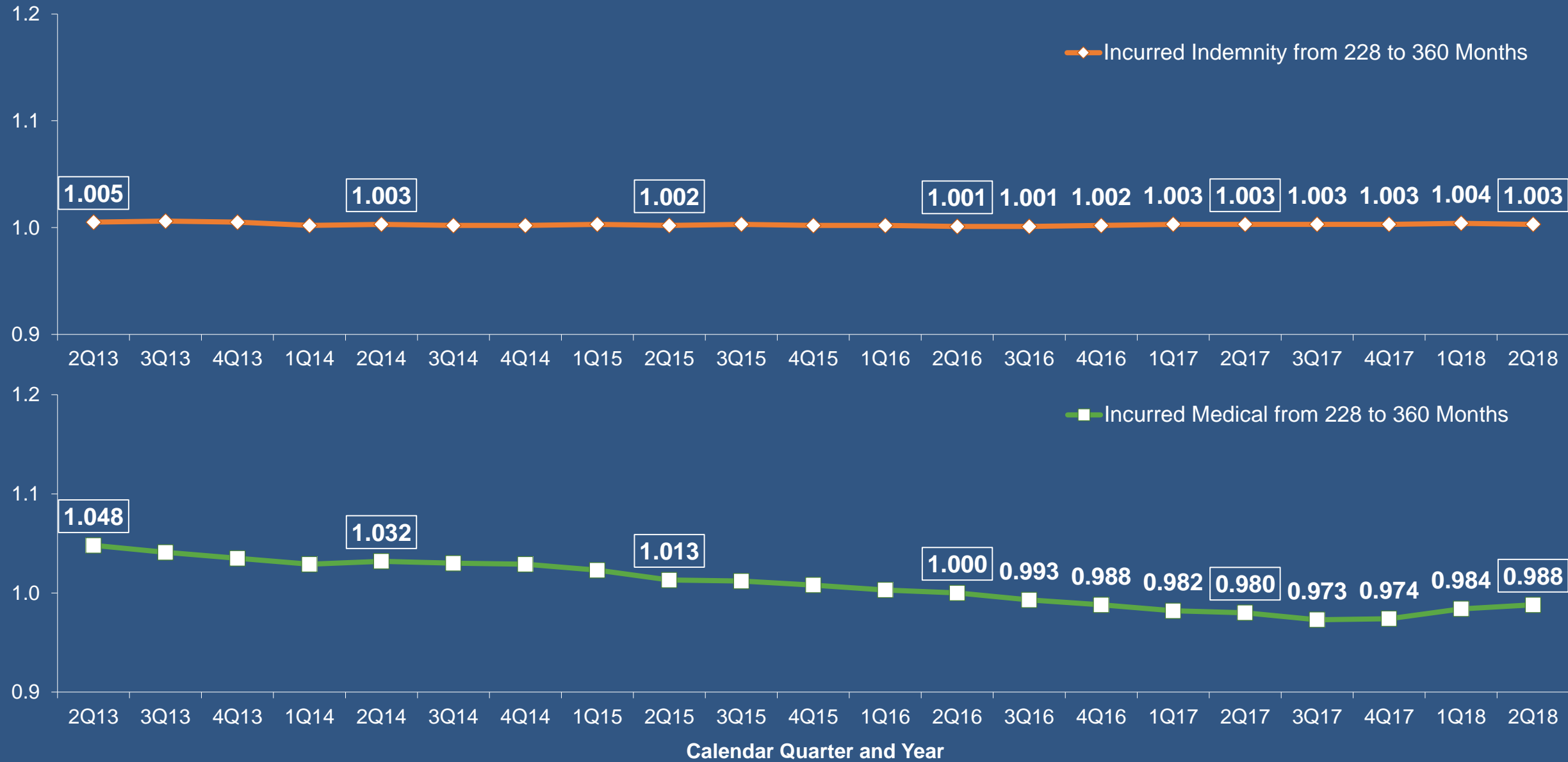
Cumulative Paid Development from 108 to 228 Months

As of June 30, 2018



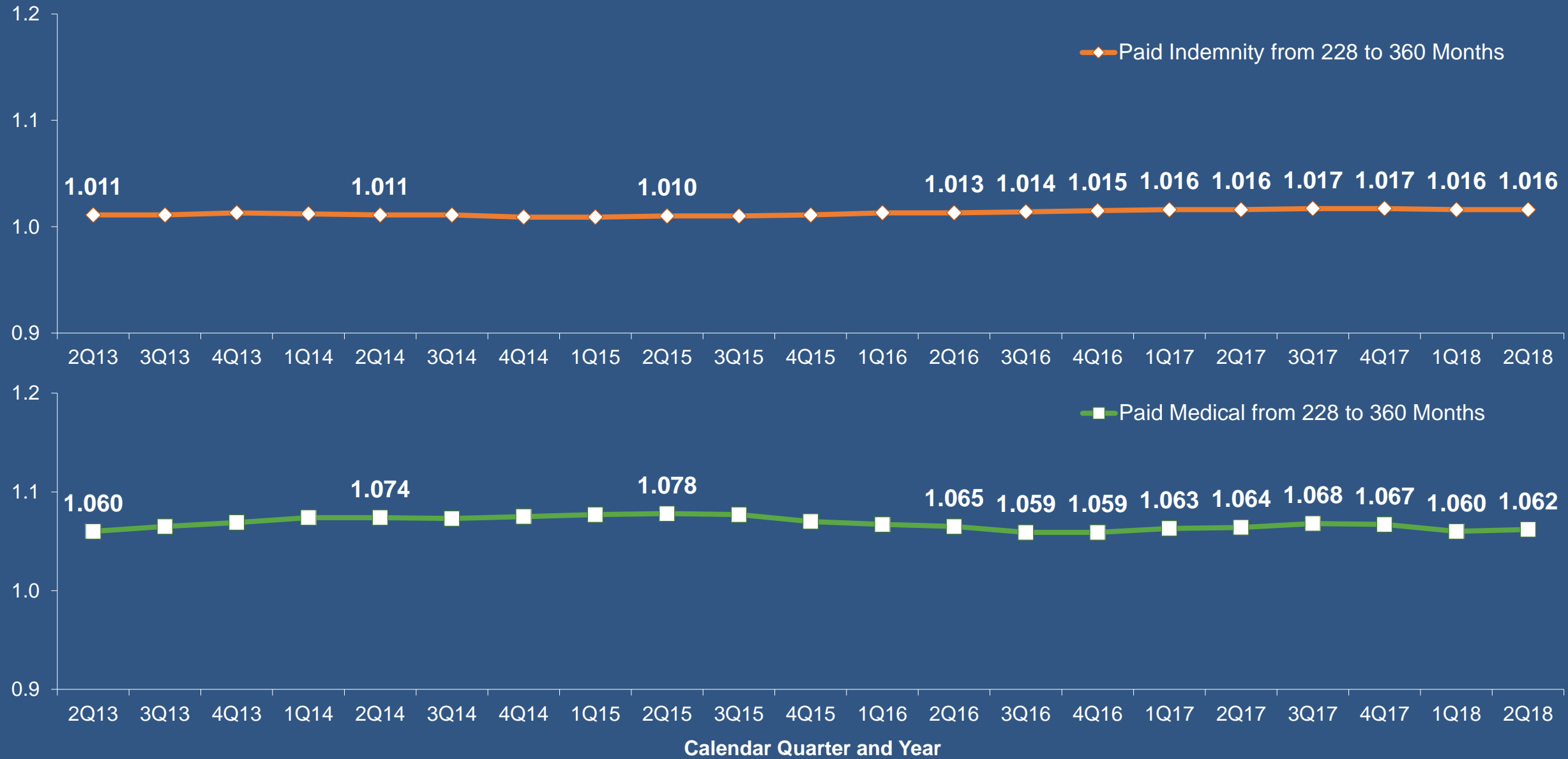
Cumulative Incurred Development from 228 to 360 Months

As of June 30, 2018



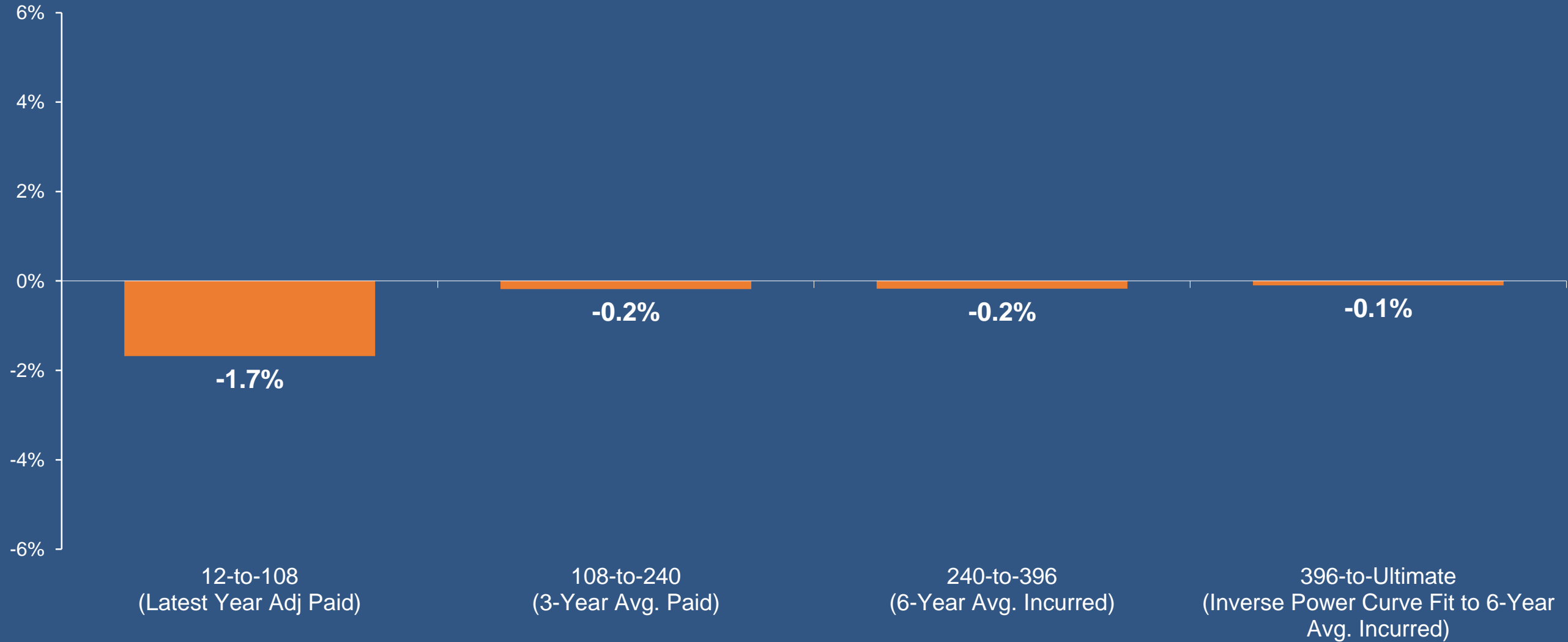
Cumulative Paid Development from 228 to 360 Months

As of June 30, 2018



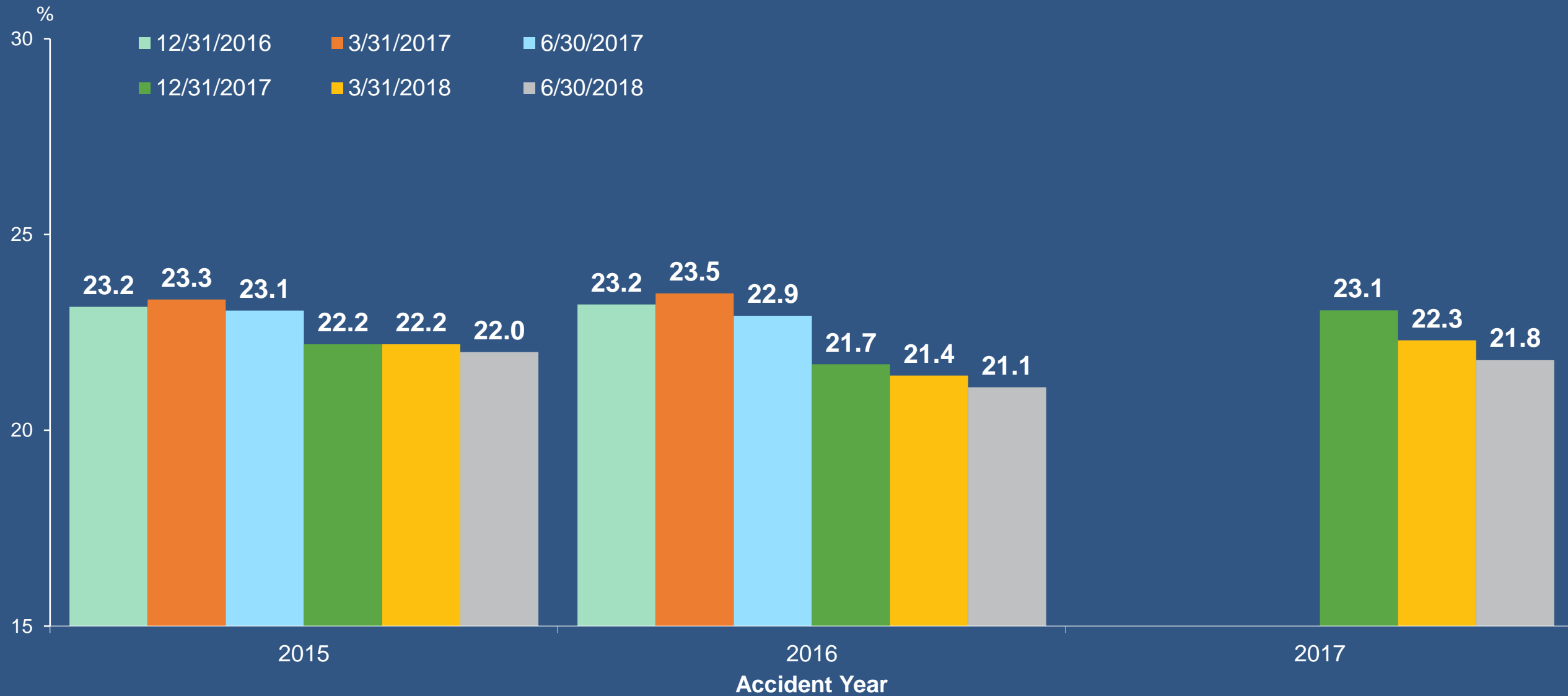
Change in Projected Medical Development Factor

3/31/2018 to 6/30/2018 Experience



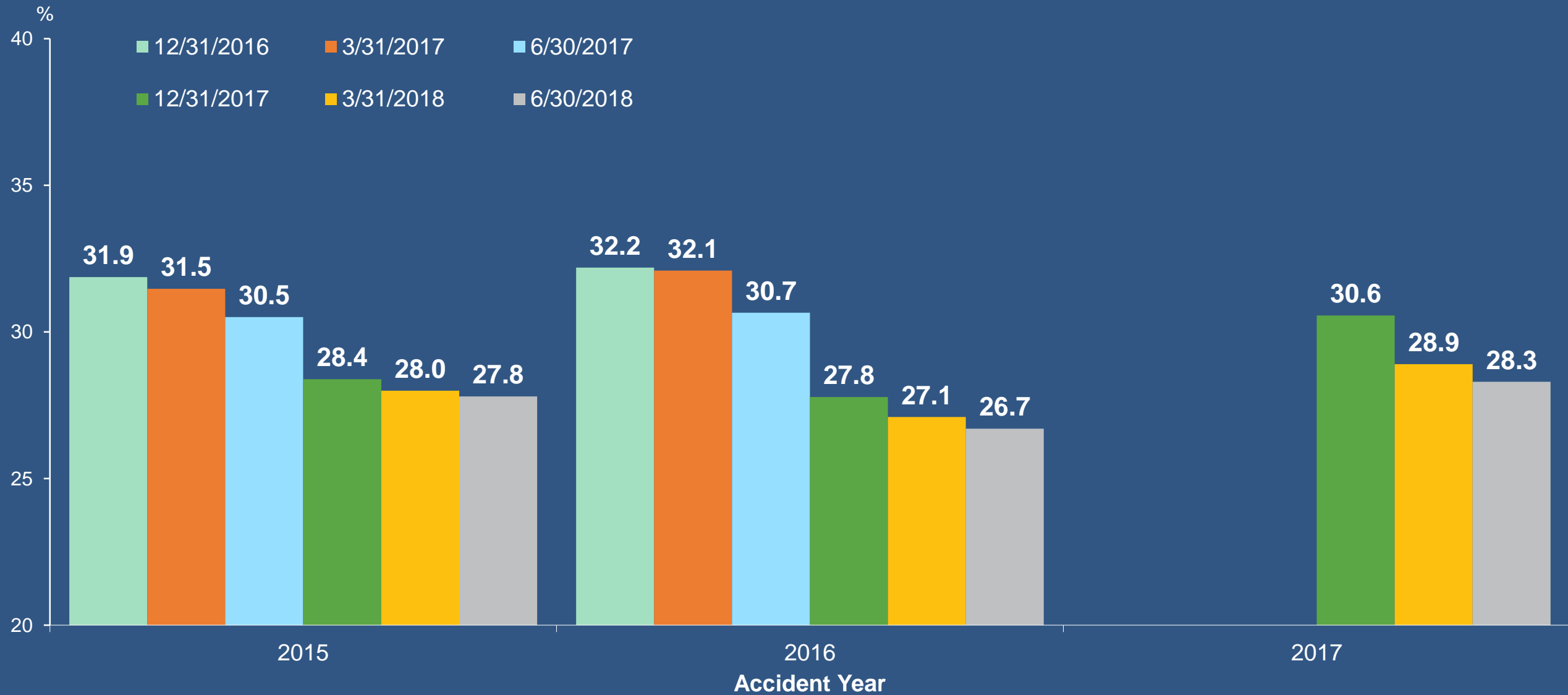
Projected Ultimate Indemnity Loss Ratios (Exhibit 3.1)

As of June 30, 2018



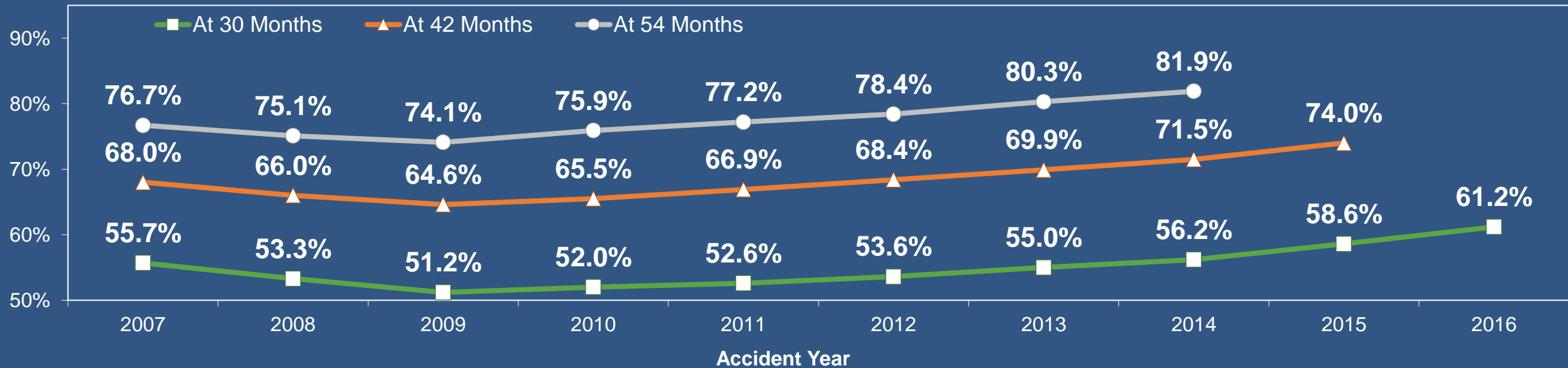
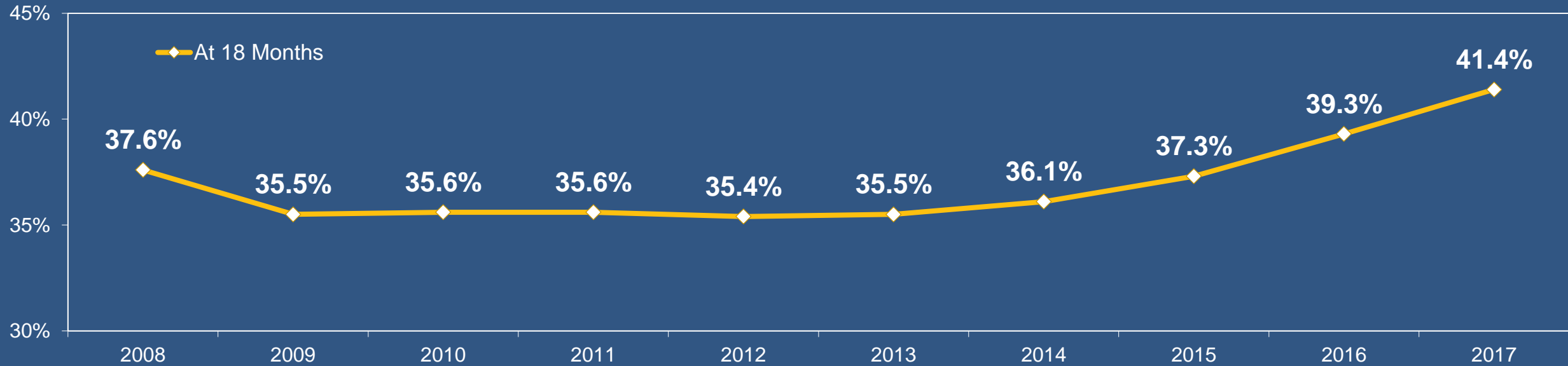
Projected Ultimate Medical Loss Ratios (Exhibit 3.2)

As of June 30, 2018



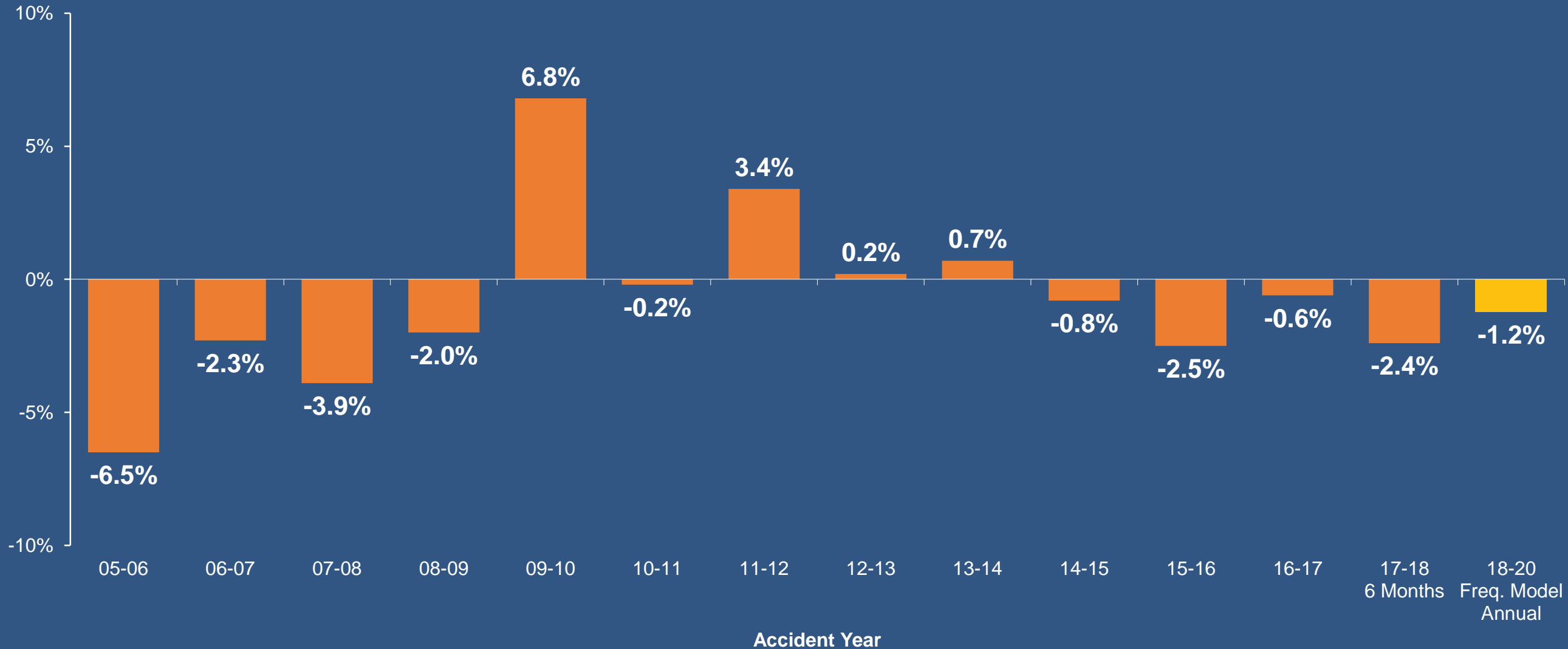
Ultimate Indemnity Claim Settlement Ratios (Exhibit 11.2)

As of June 30, 2018



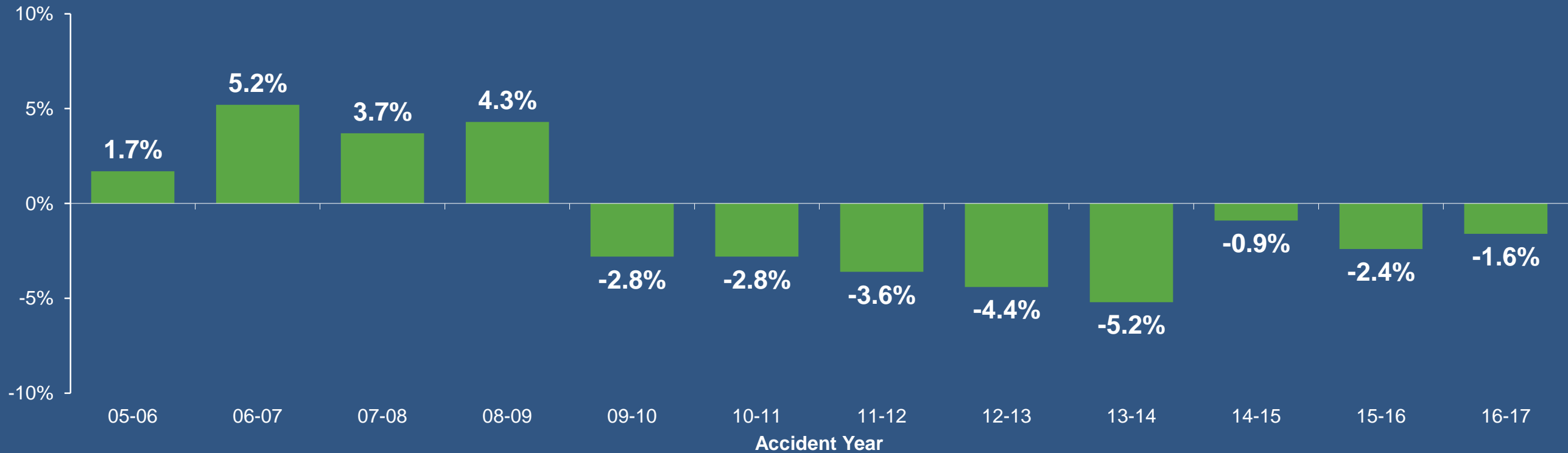
Projected Changes in Indemnity Claim Frequency (Exhibits 6.1 & 12)

As of June 30, 2018



Projected Changes in On-Level Indemnity Severity (Exhibit 6.2)

As of June 30, 2018



Annual Exponential Trend Based on:

1990 to 2017: +1.6%

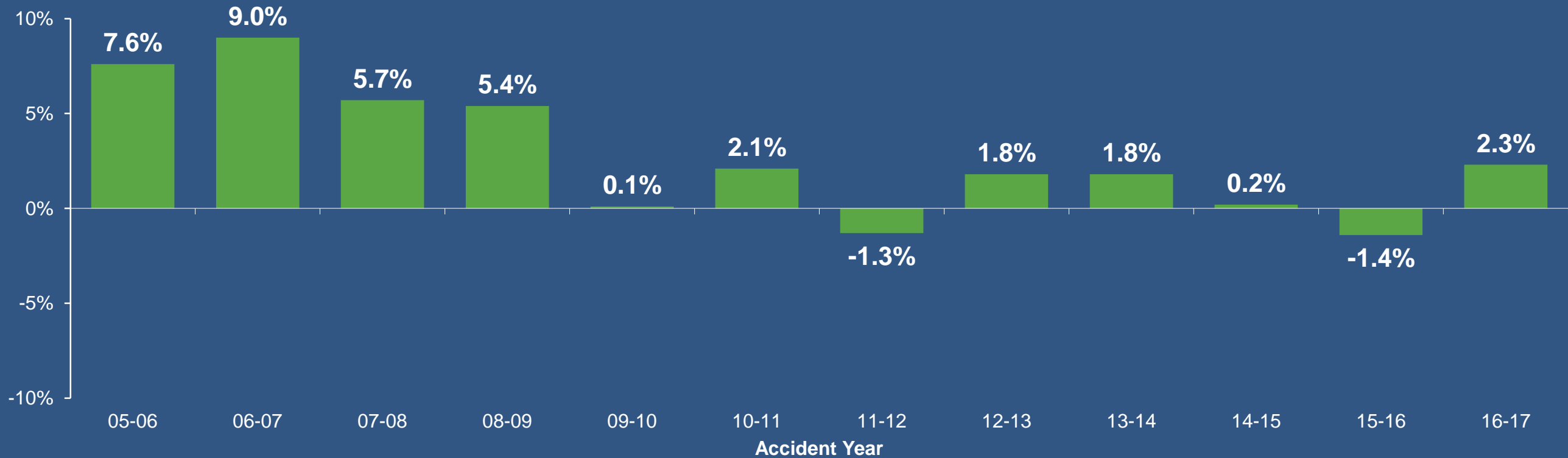
2005 to 2017: -1.3%

2013 to 2017: -2.4%

Agenda Selected: **-0.5%**

Projected Changes in On-Level Medical Severity (Exhibit 6.4)

As of June 30, 2018



Annual Exponential Trend Based on:

1990 to 2017 (Incl. MCCP): +6.1%

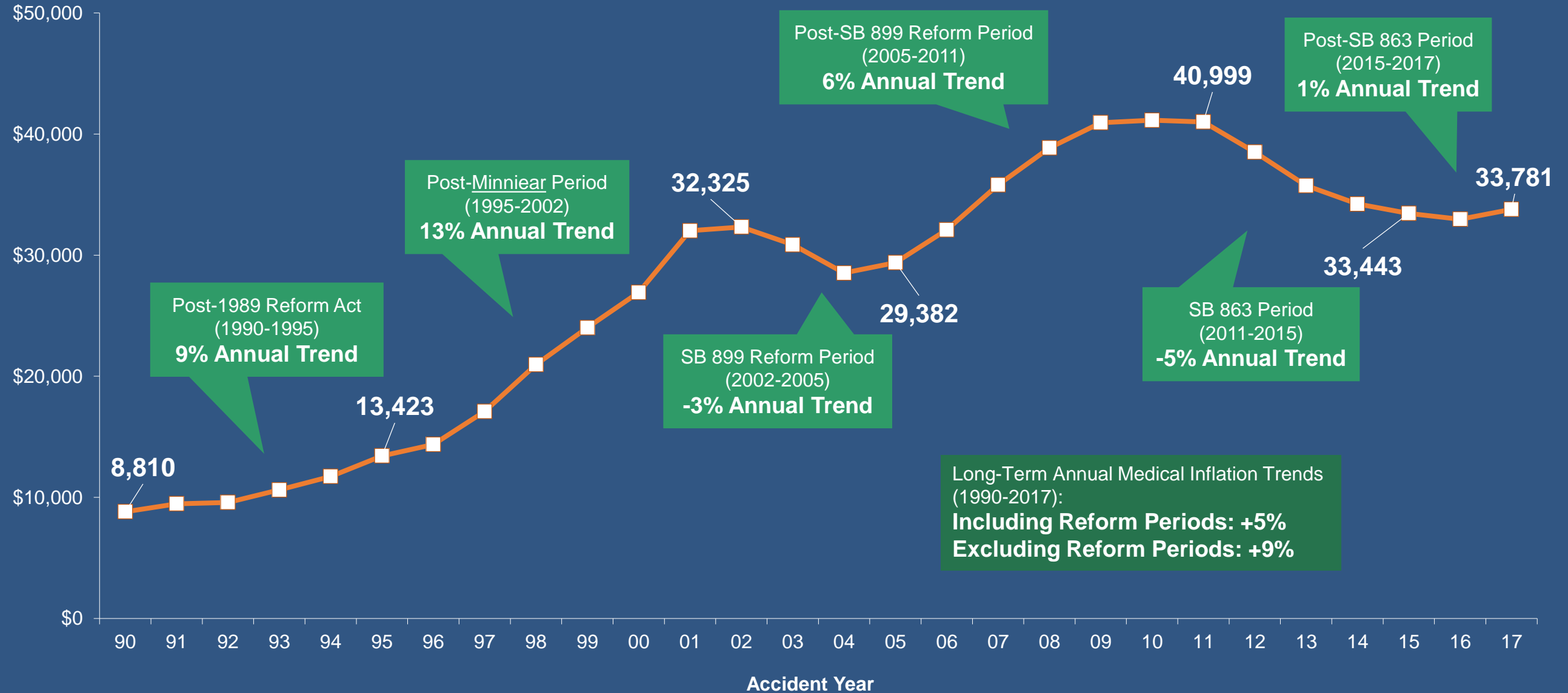
2005 to 2017: +2.2%

2013 to 2017: +0.4%

Agenda Selected: **2.5%**

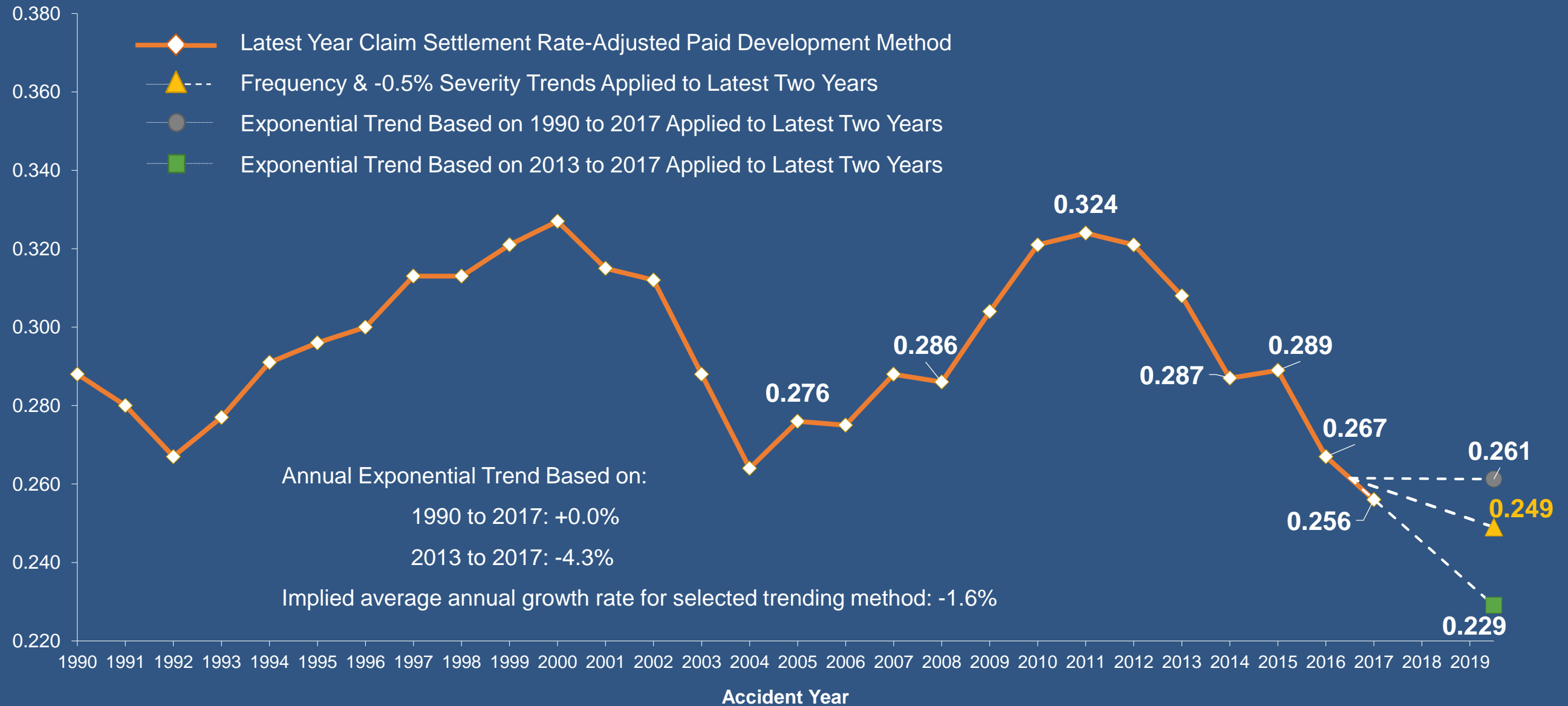
Ultimate Medical per Indemnity Claim (Exhibits 6.3 & 6.4)

As of June 30, 2018



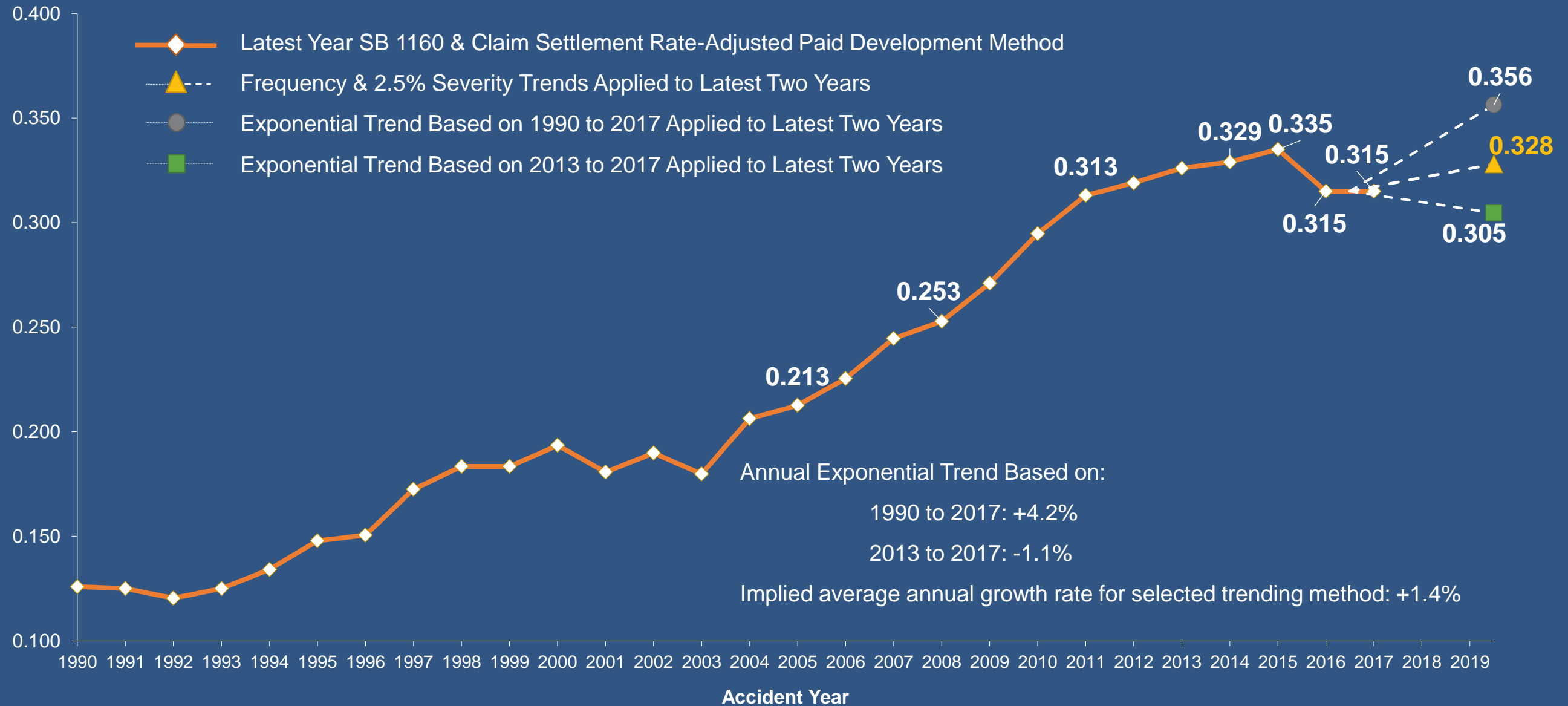
Projected On-Level Indemnity Loss Ratios (Exhibit 7.1)

As of June 30, 2018



Projected On-Level Medical Loss Ratios (Exhibit 7.3)

As of June 30, 2018

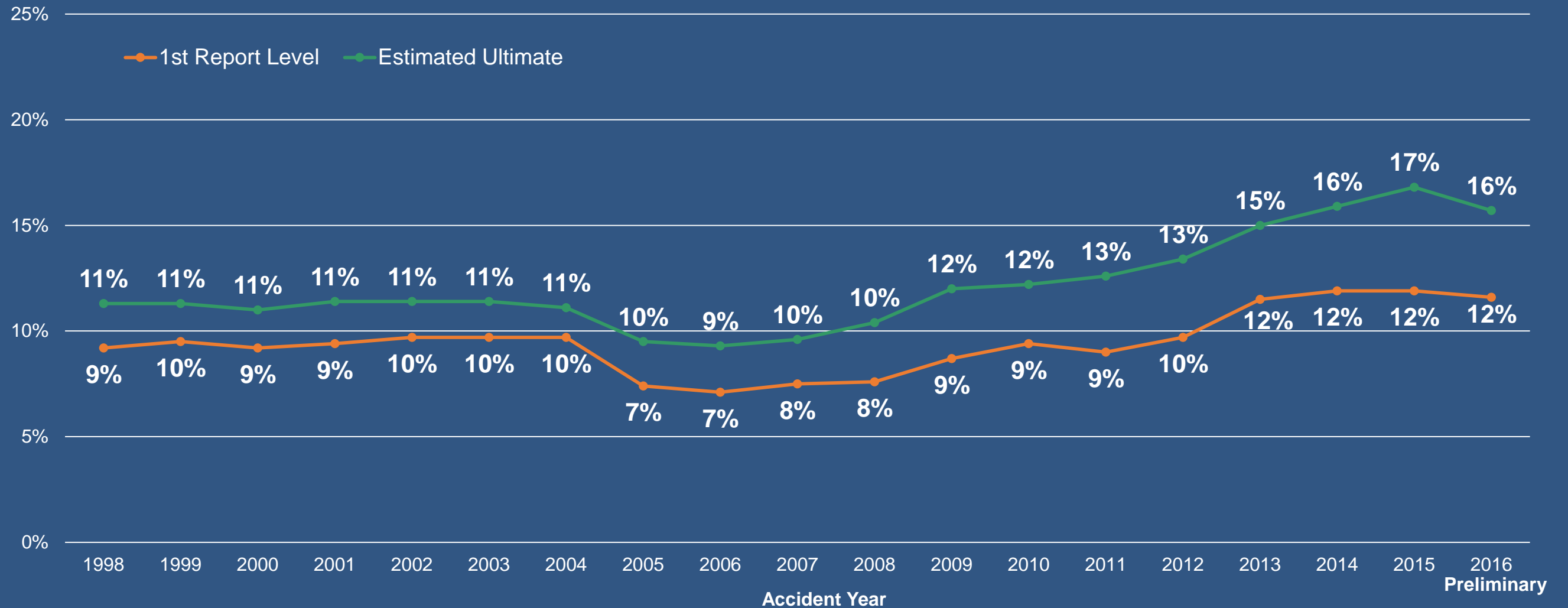


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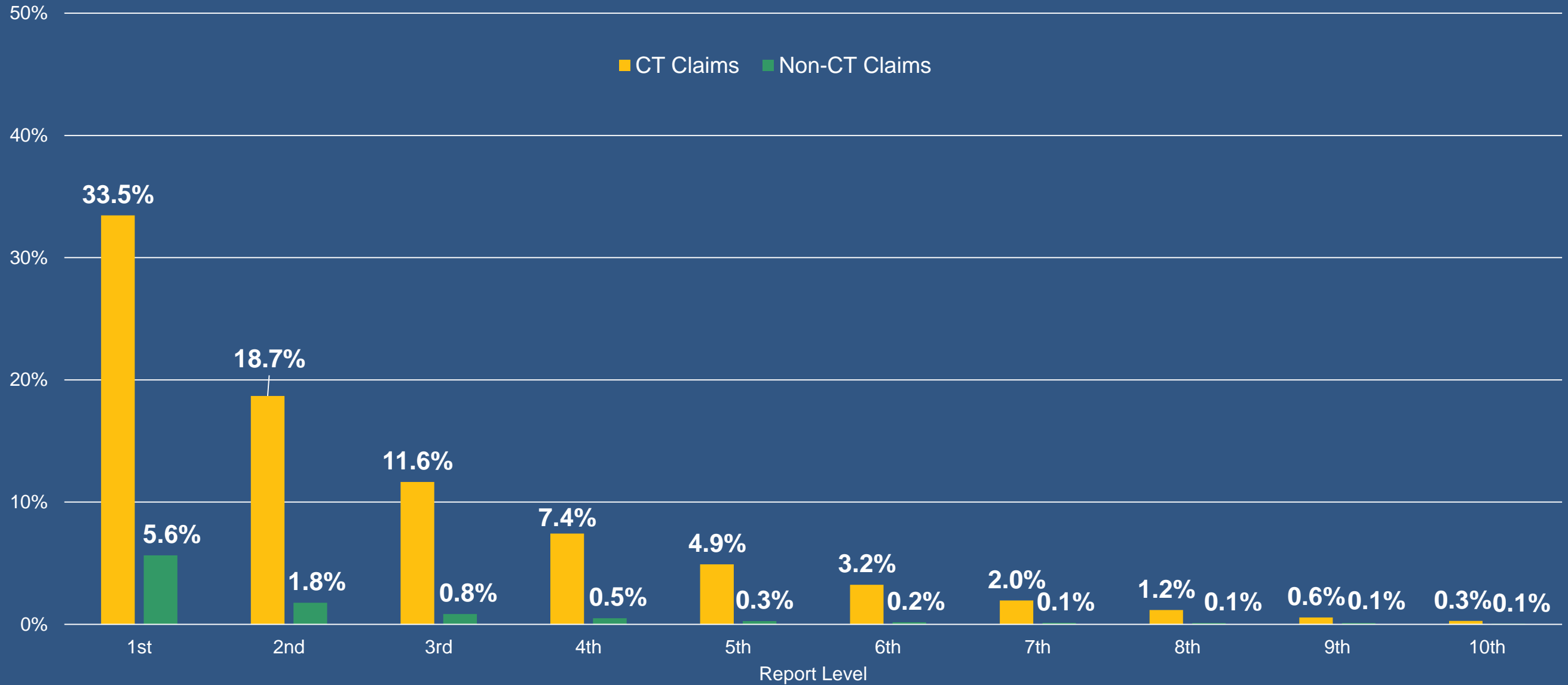
Cumulative Trauma Claim Study



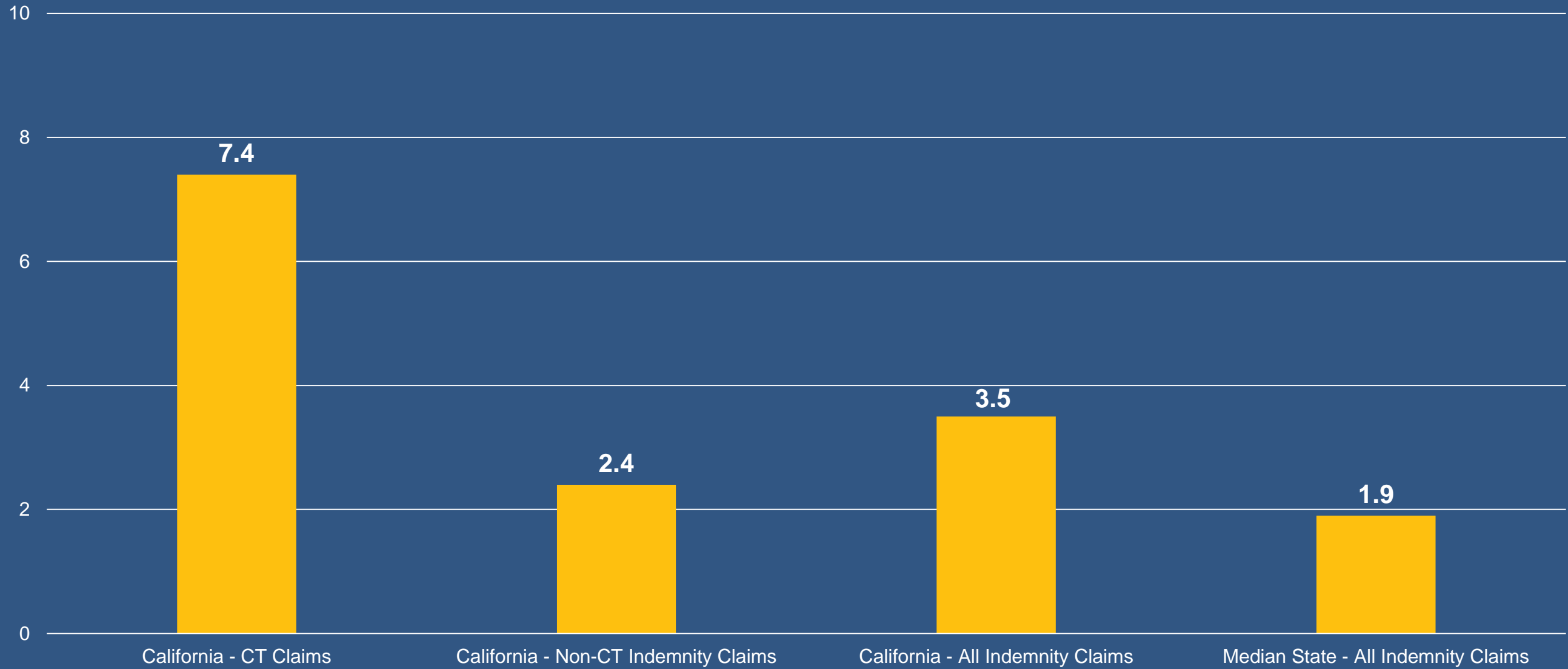
Percentage of Indemnity Claims that are CT



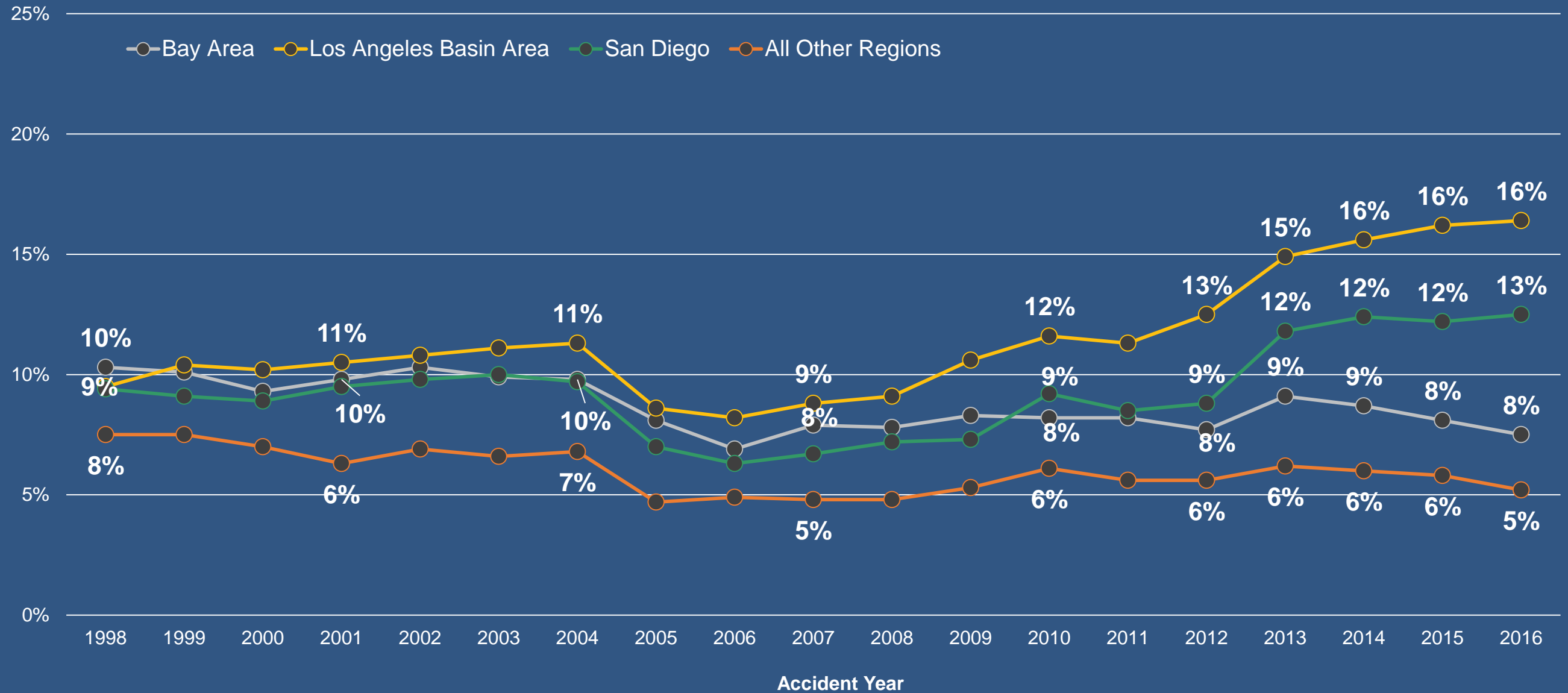
Percentage of Claims Unreported



Number of Years until 98% of Claims are Reported

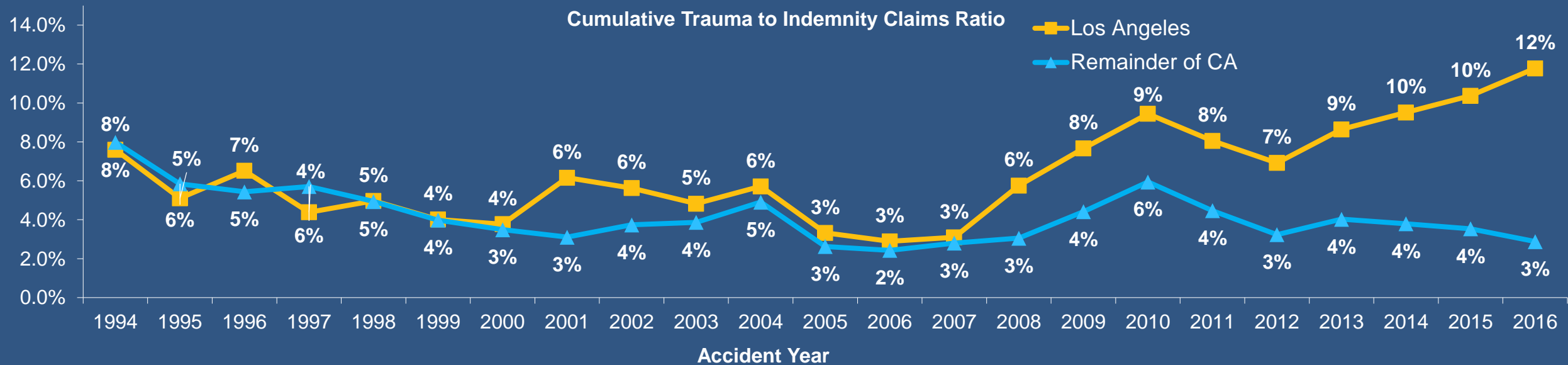
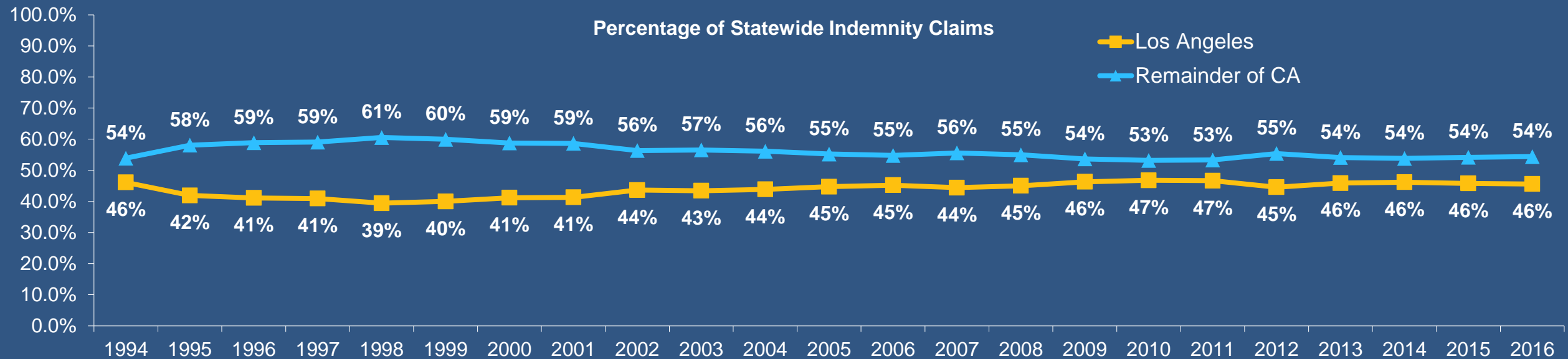


Percentage of Indemnity Claims that are CT



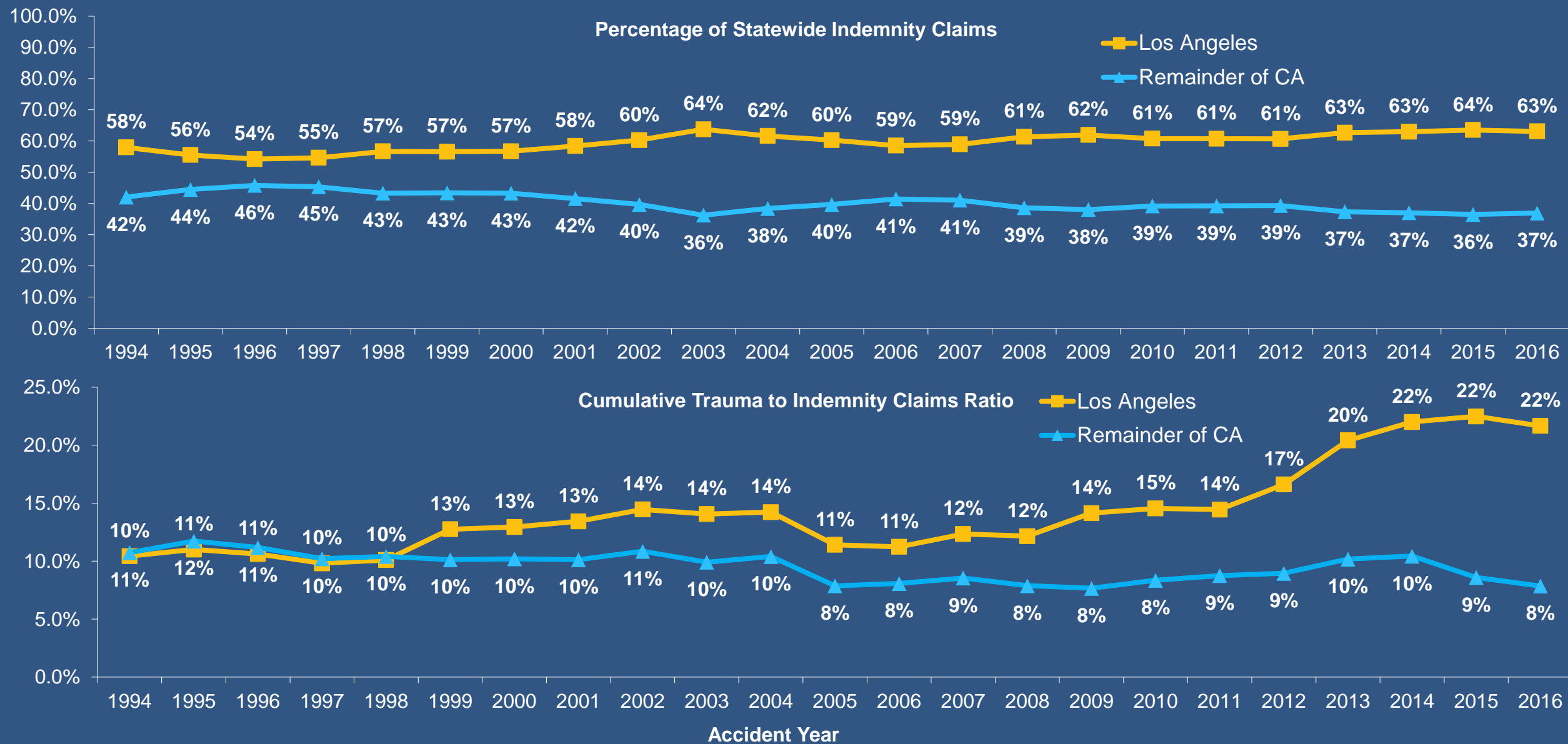
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Construction



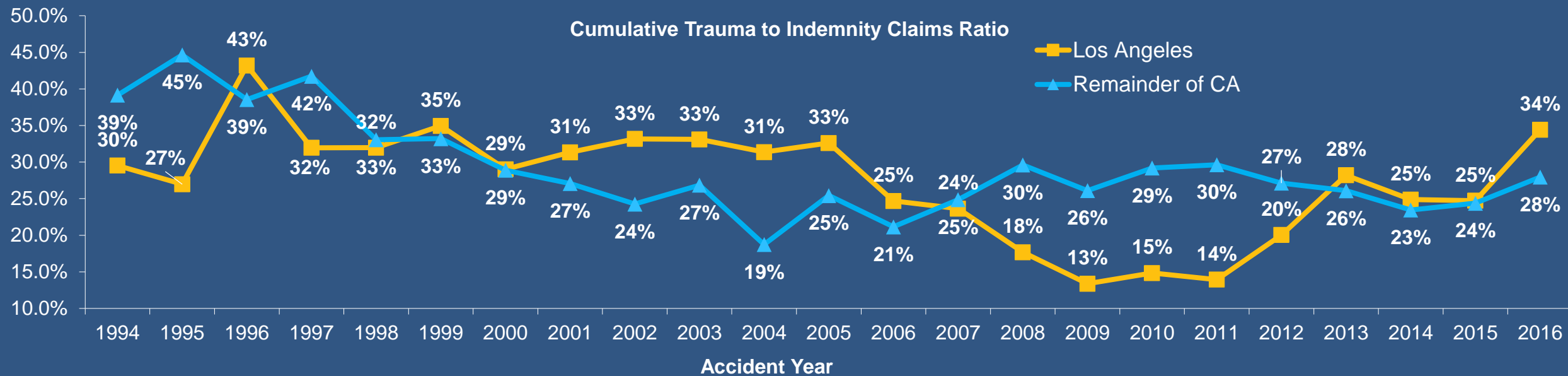
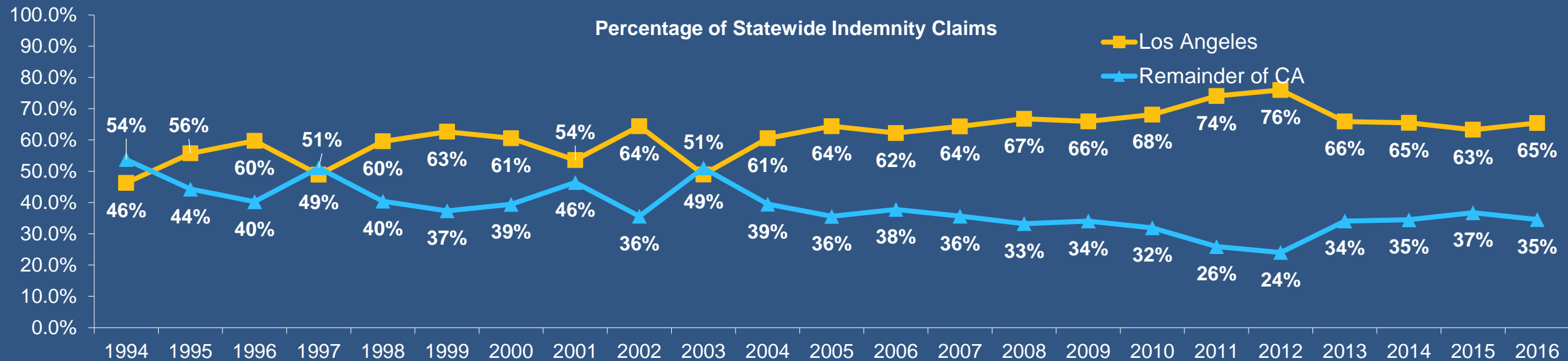
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Manufacturing



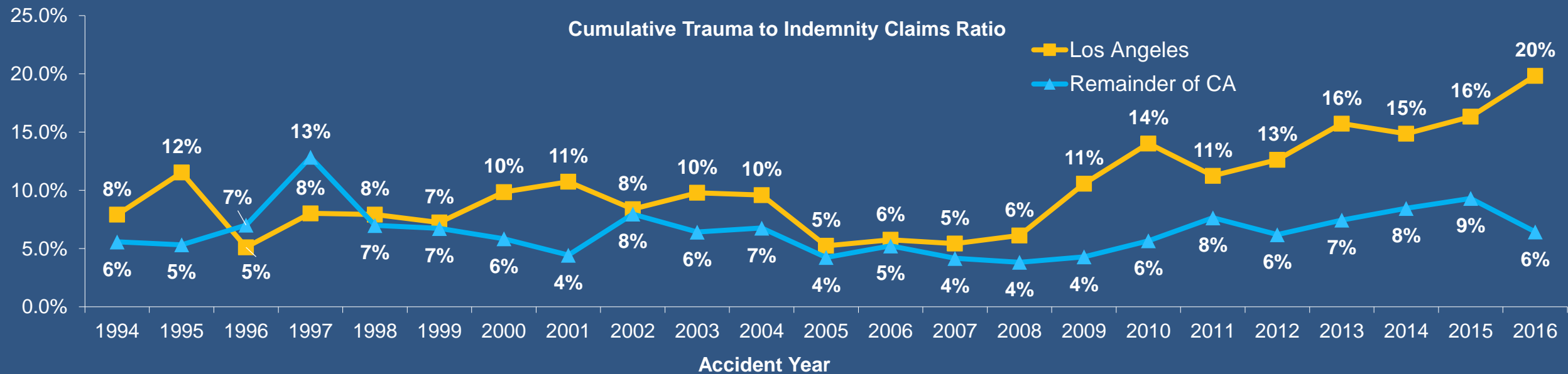
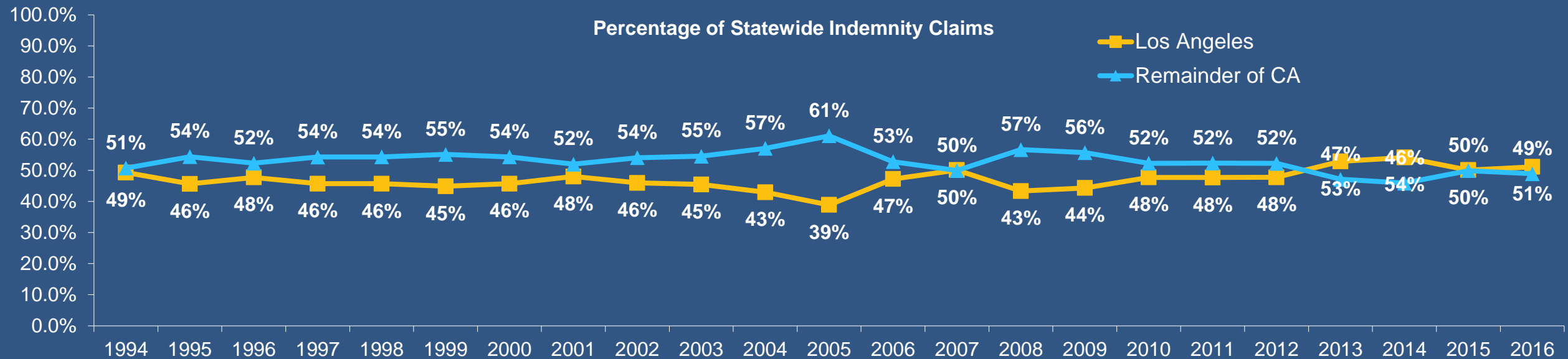
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Finance & Insurance



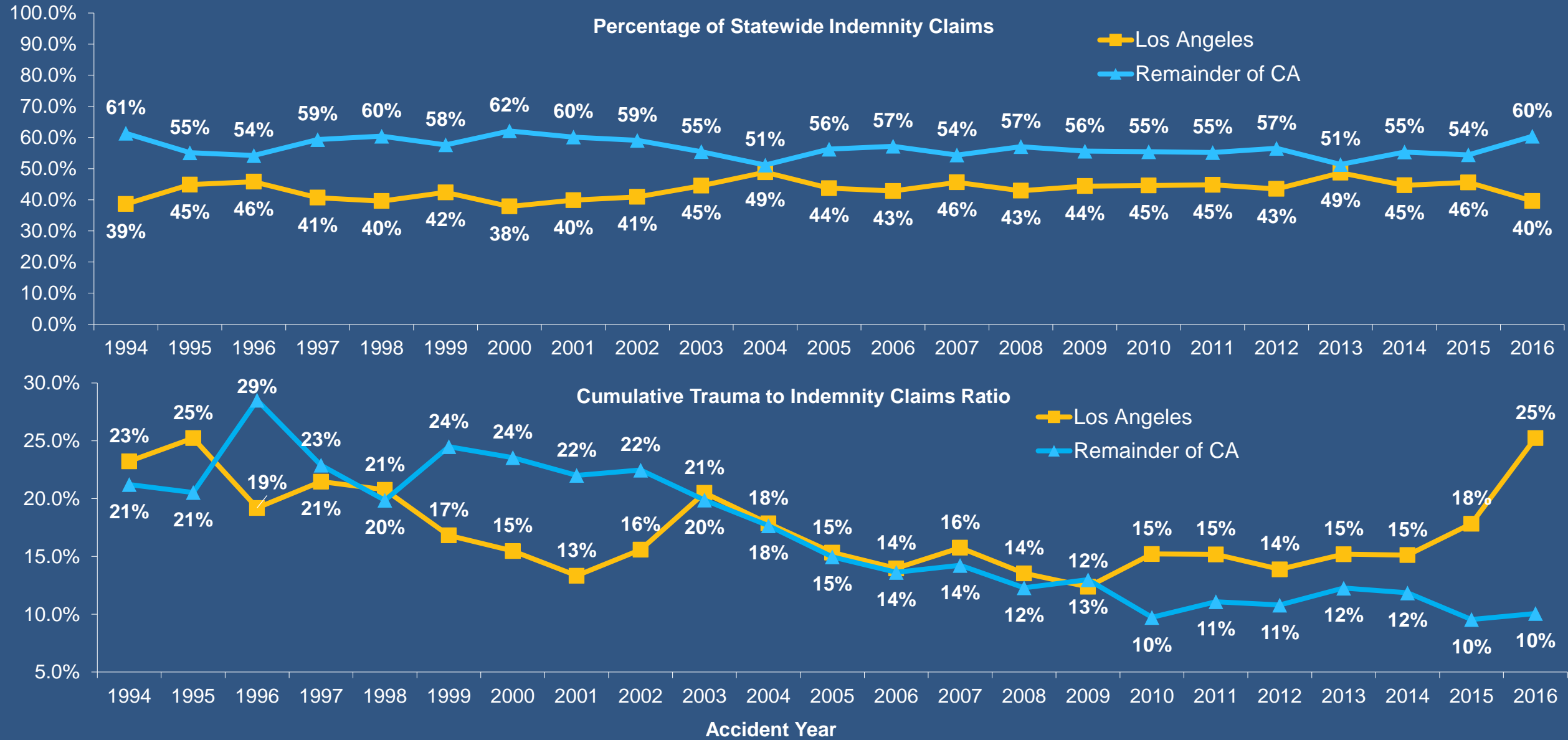
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Real Estate

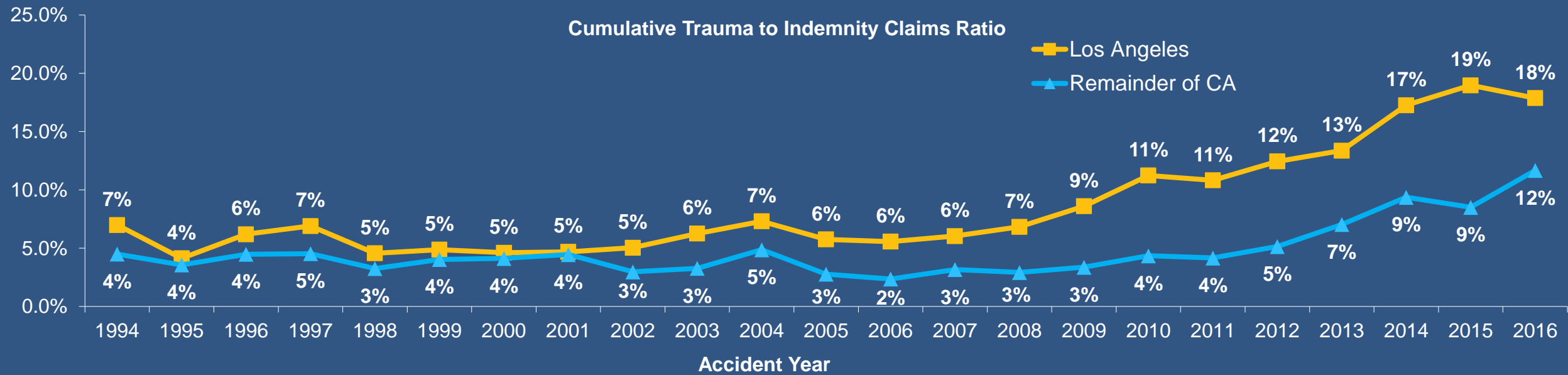
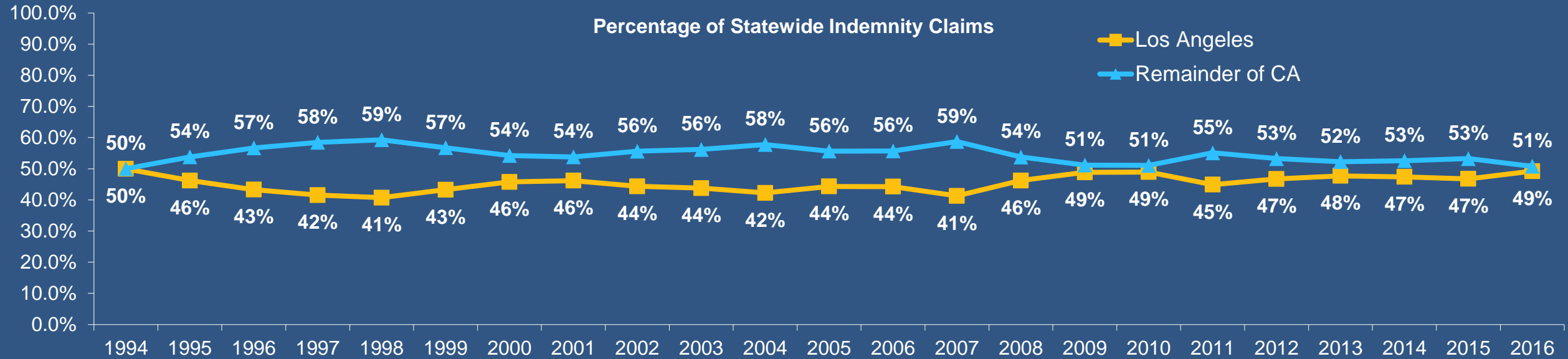


Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Professional Services

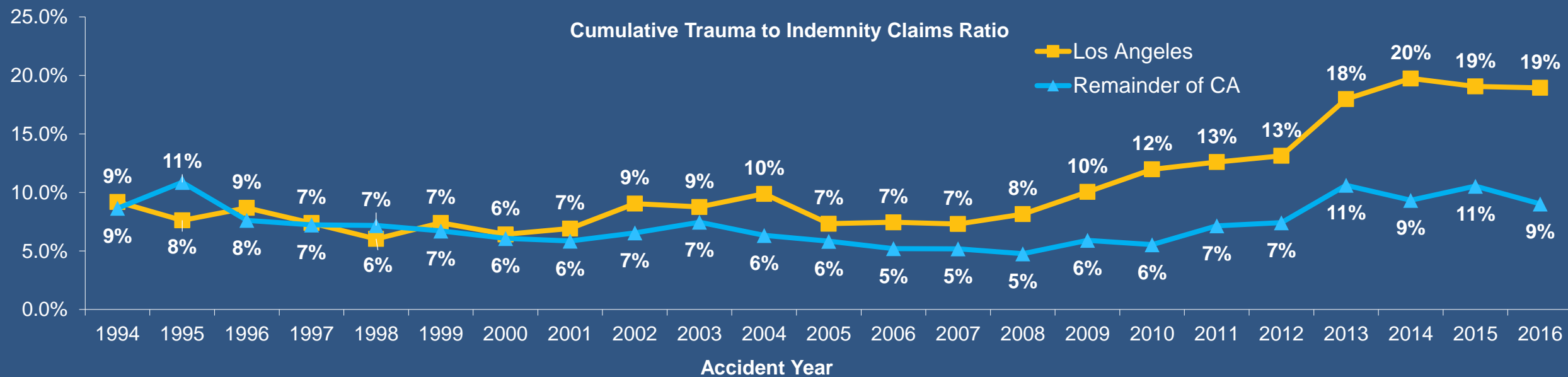
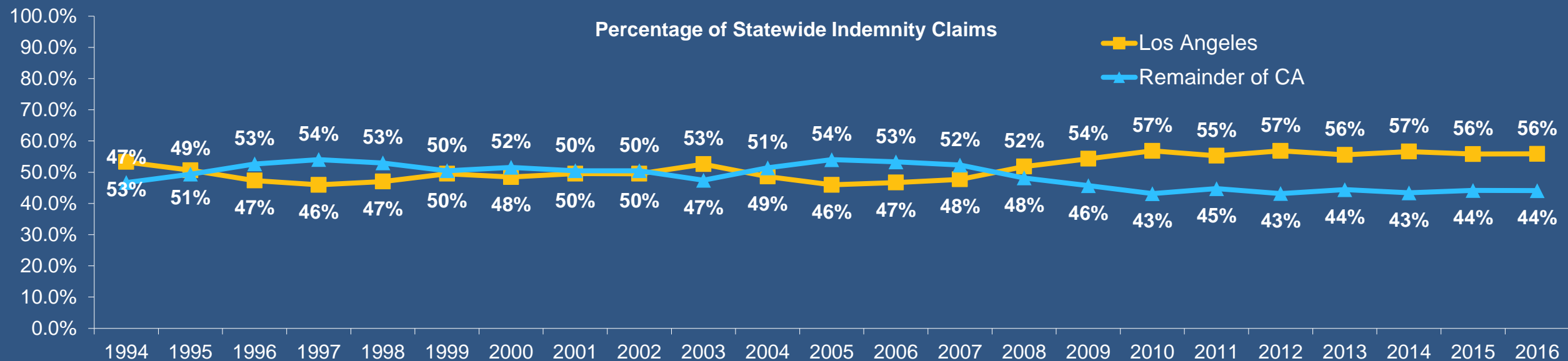


Cumulative Trauma by NAICS Industry by Region at 1st Report Level Administrative



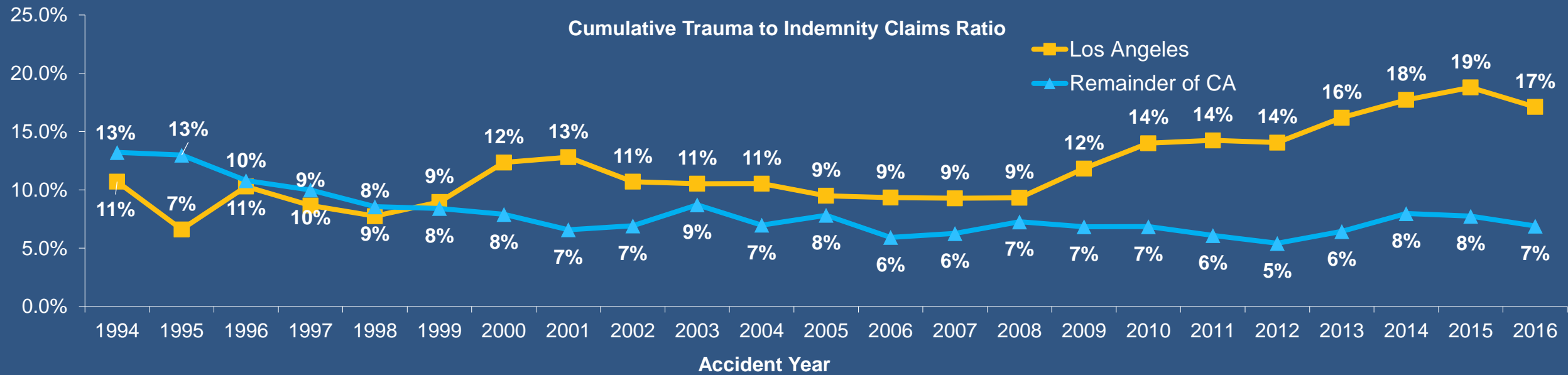
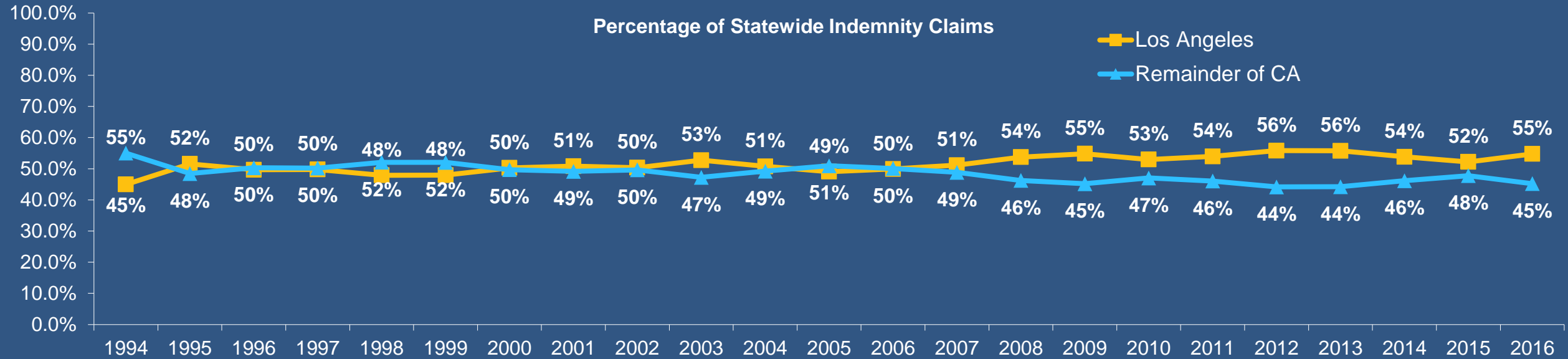
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Hospitality



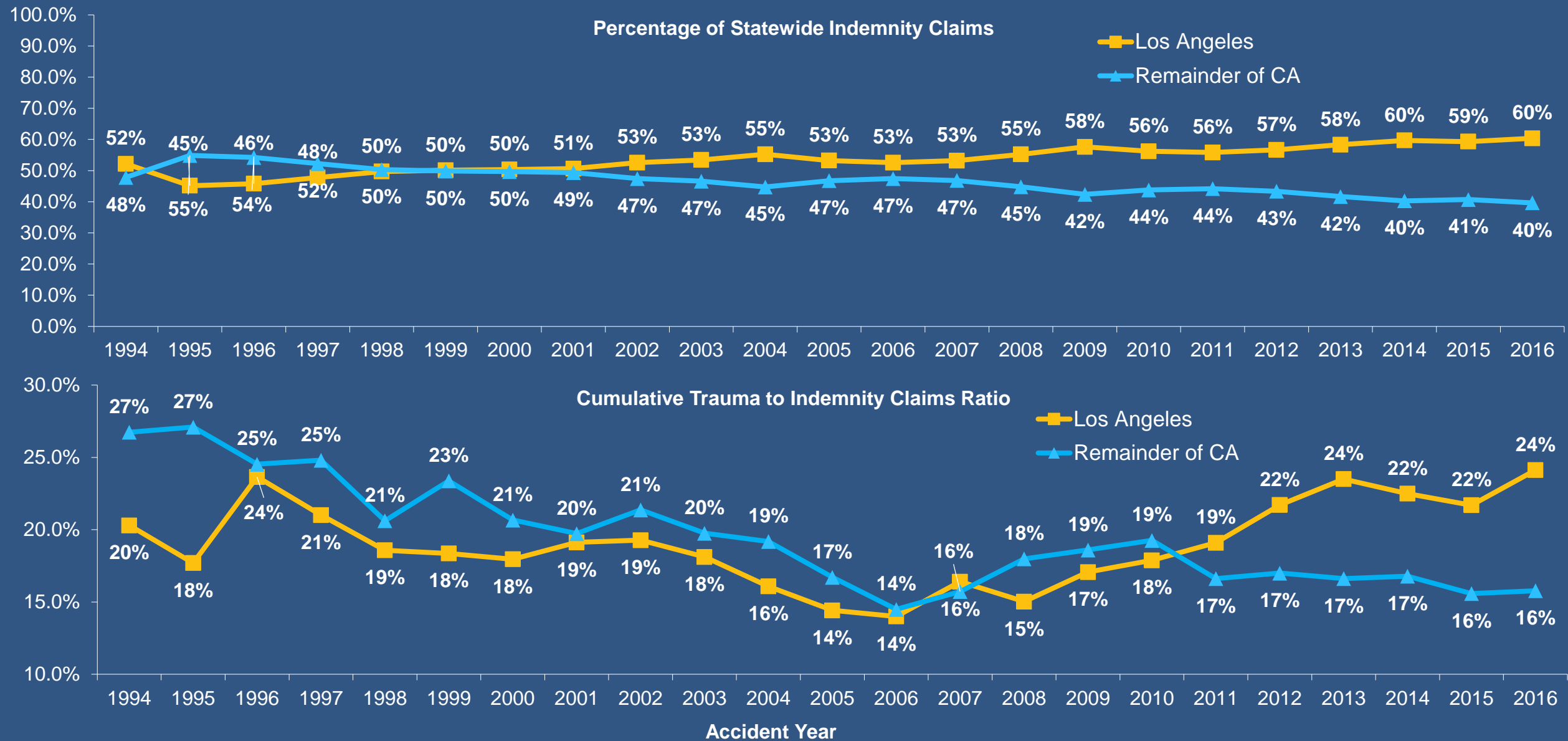
Cumulative Trauma by NAICS Industry by Region at 1st Report Level

Other Services

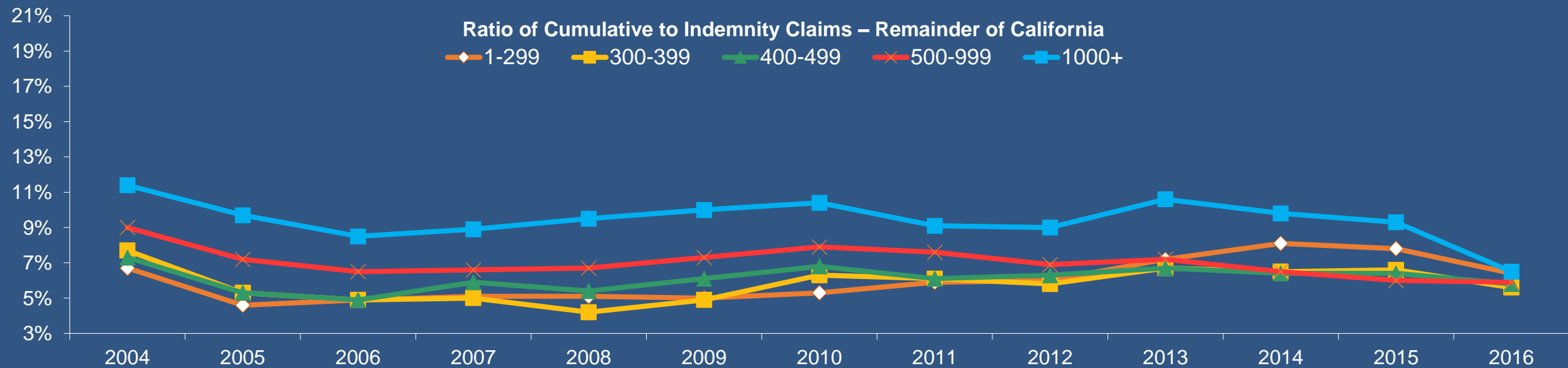
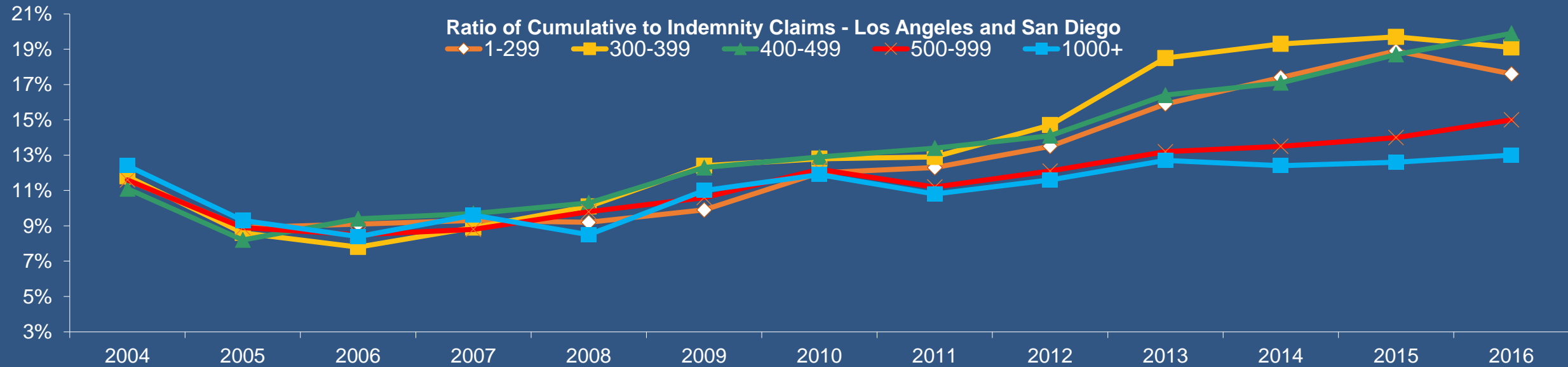


Cumulative Trauma by NAICS Industry by Region at 1st Report Level

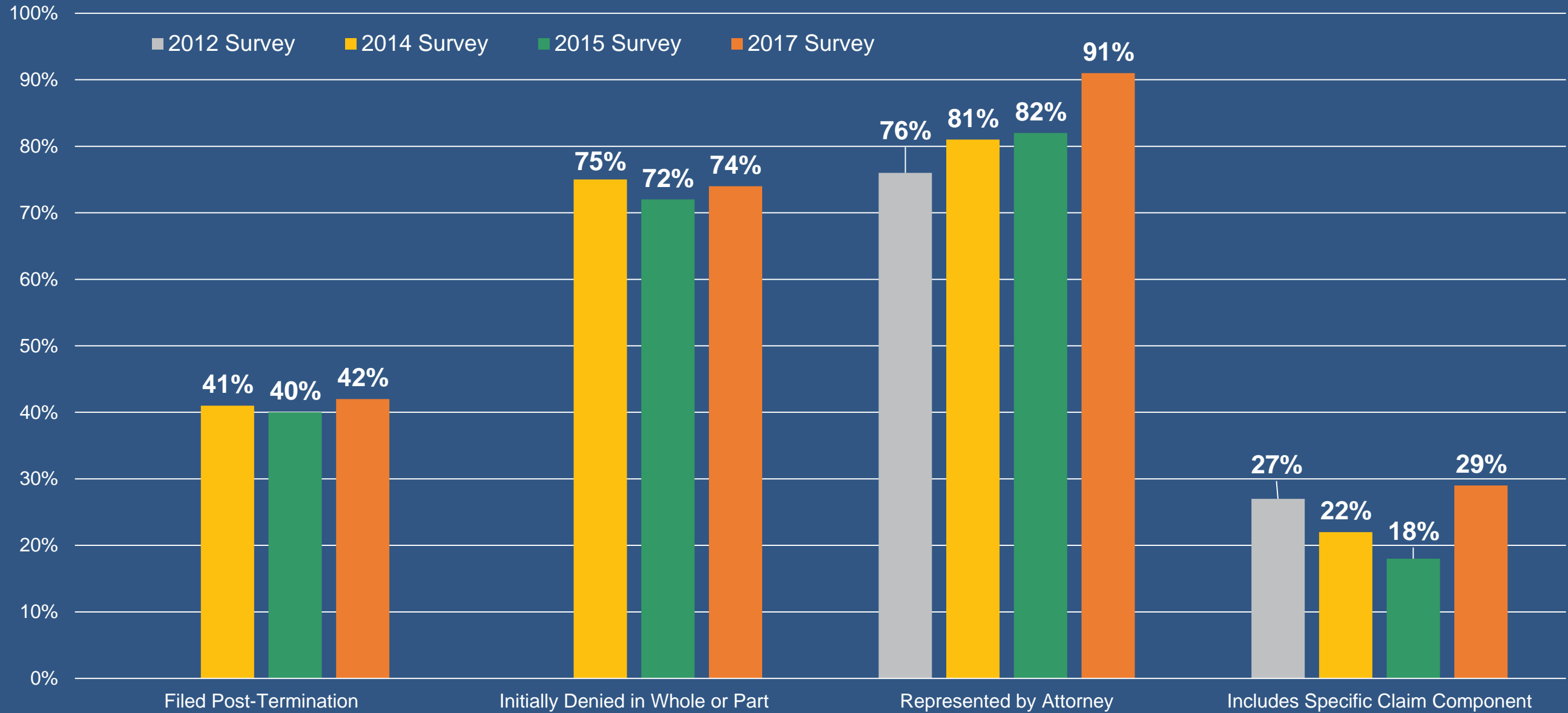
Outside Sales & Clerical



Percentage of Cumulative Indemnity Claims at 1st Report Level by Region and Average Weekly Wage

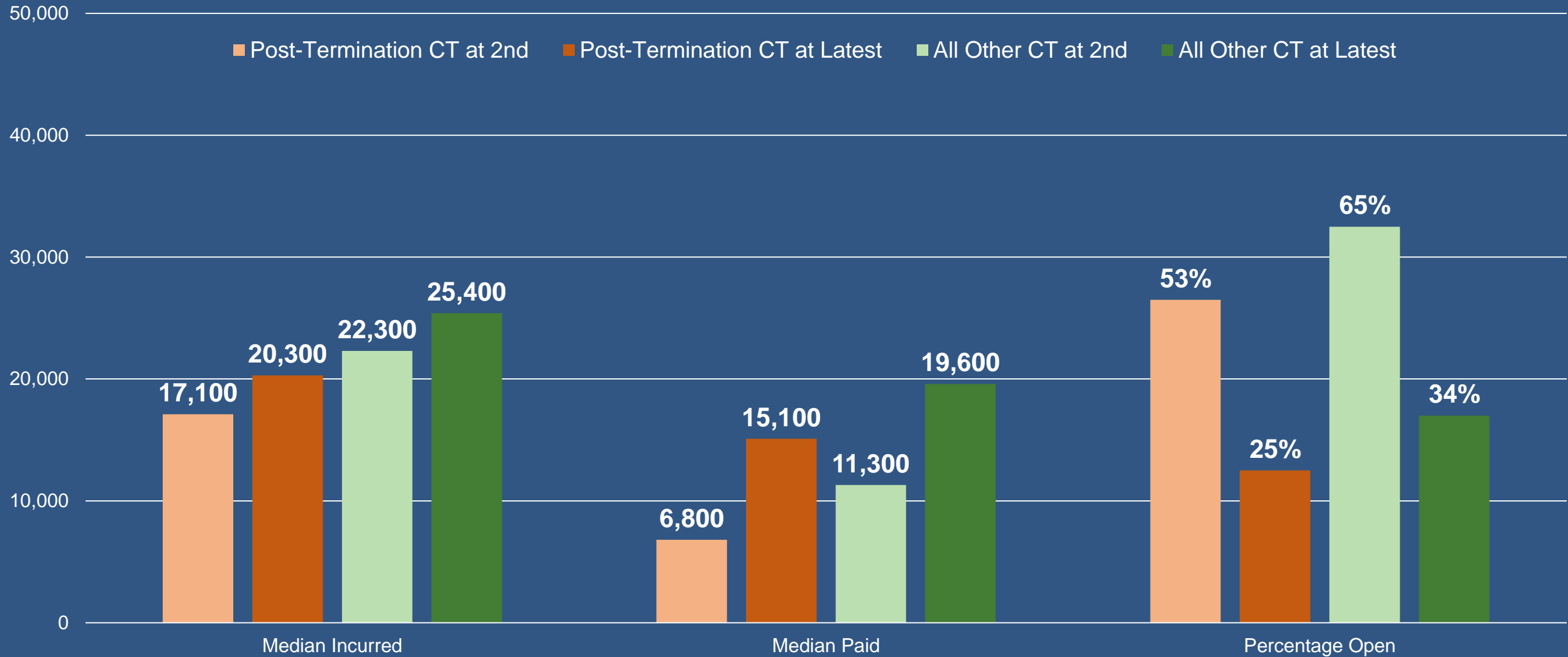


Characteristics of CT Claims from Survey Data



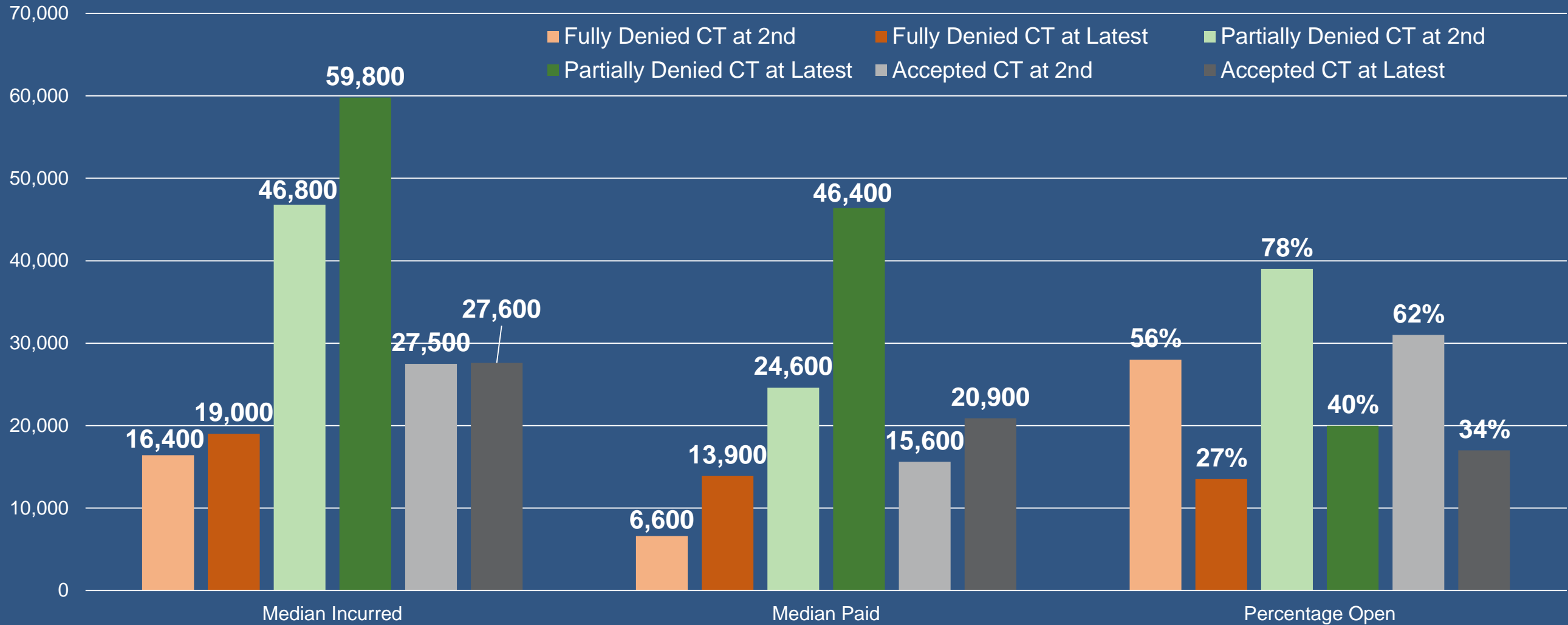
Post-Survey CT Claim Development

Post-Termination Claims for Accident Years 2012-2014



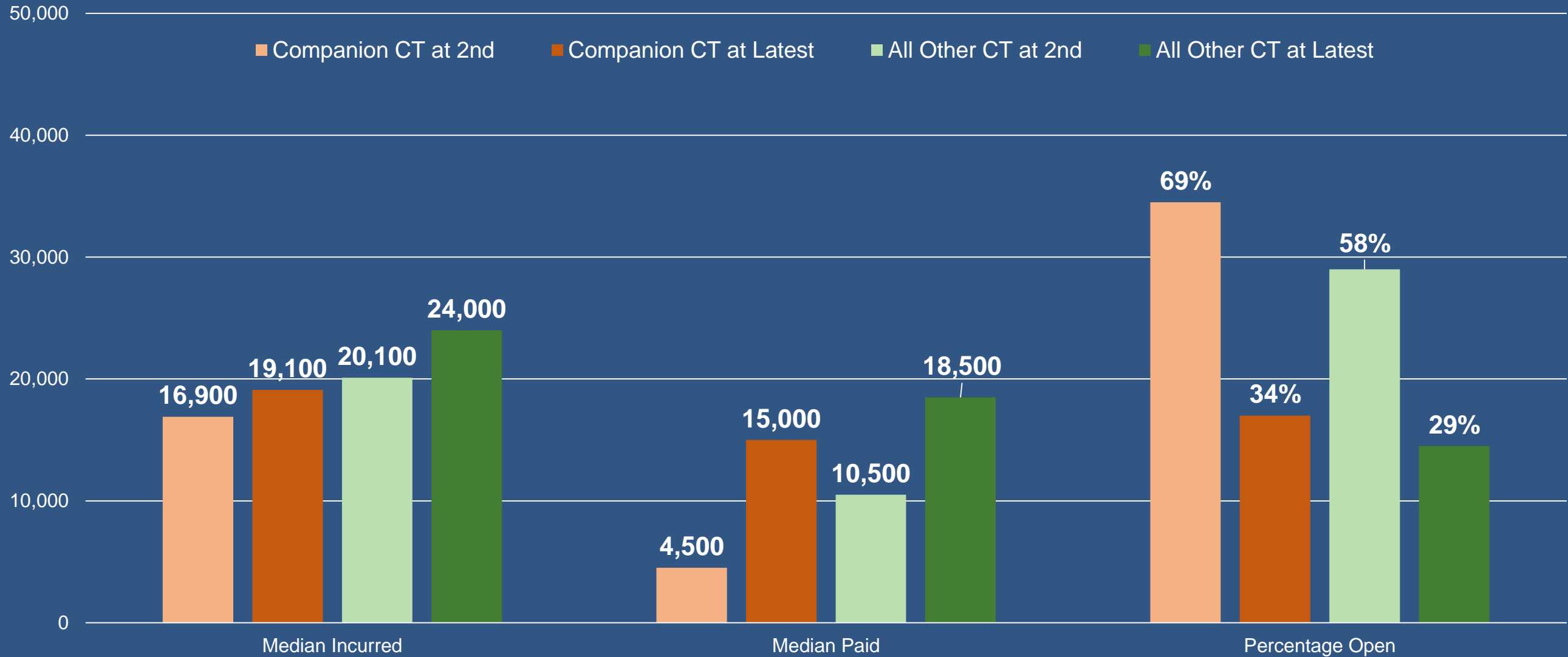
Post-Survey CT Claim Development

Denied Claims for Accident Years 2012-2014



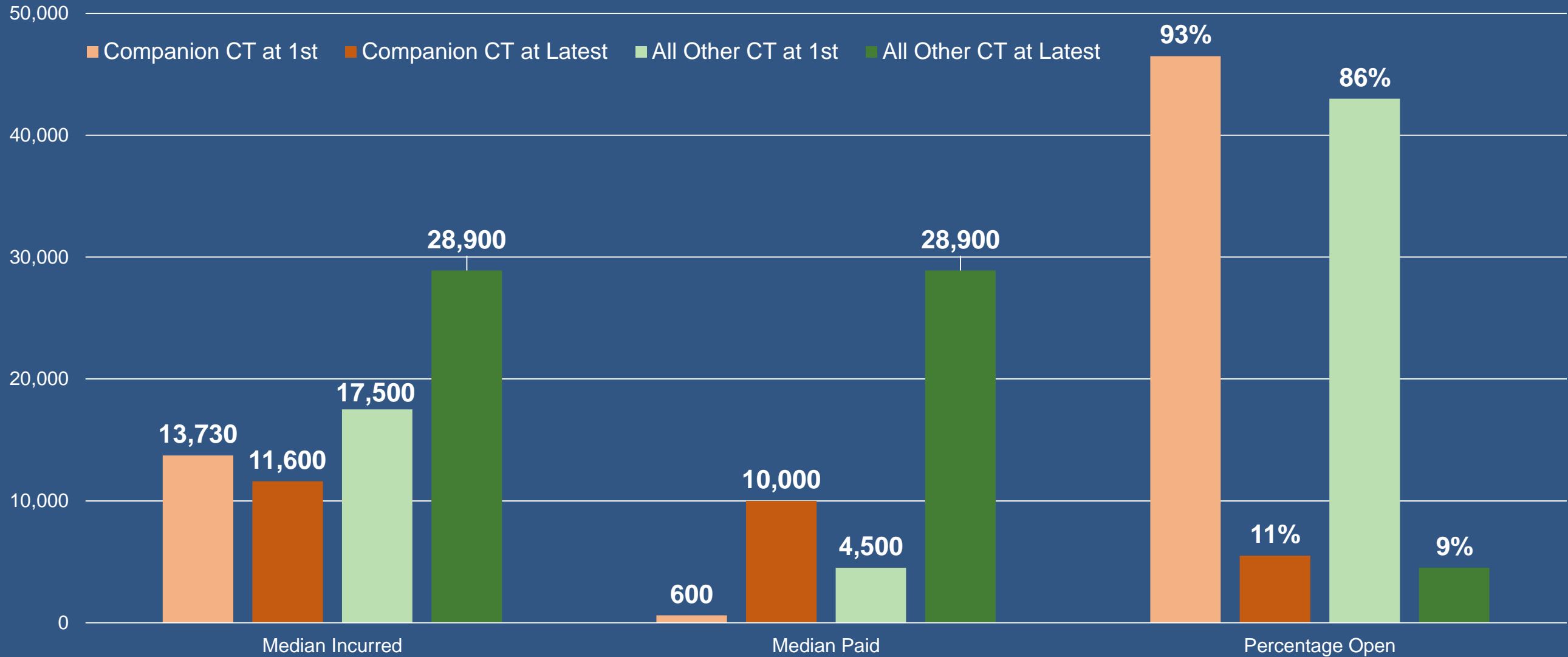
Post-Survey CT Claim Development

Claims with Specific Component for Accident Years 2012-2014



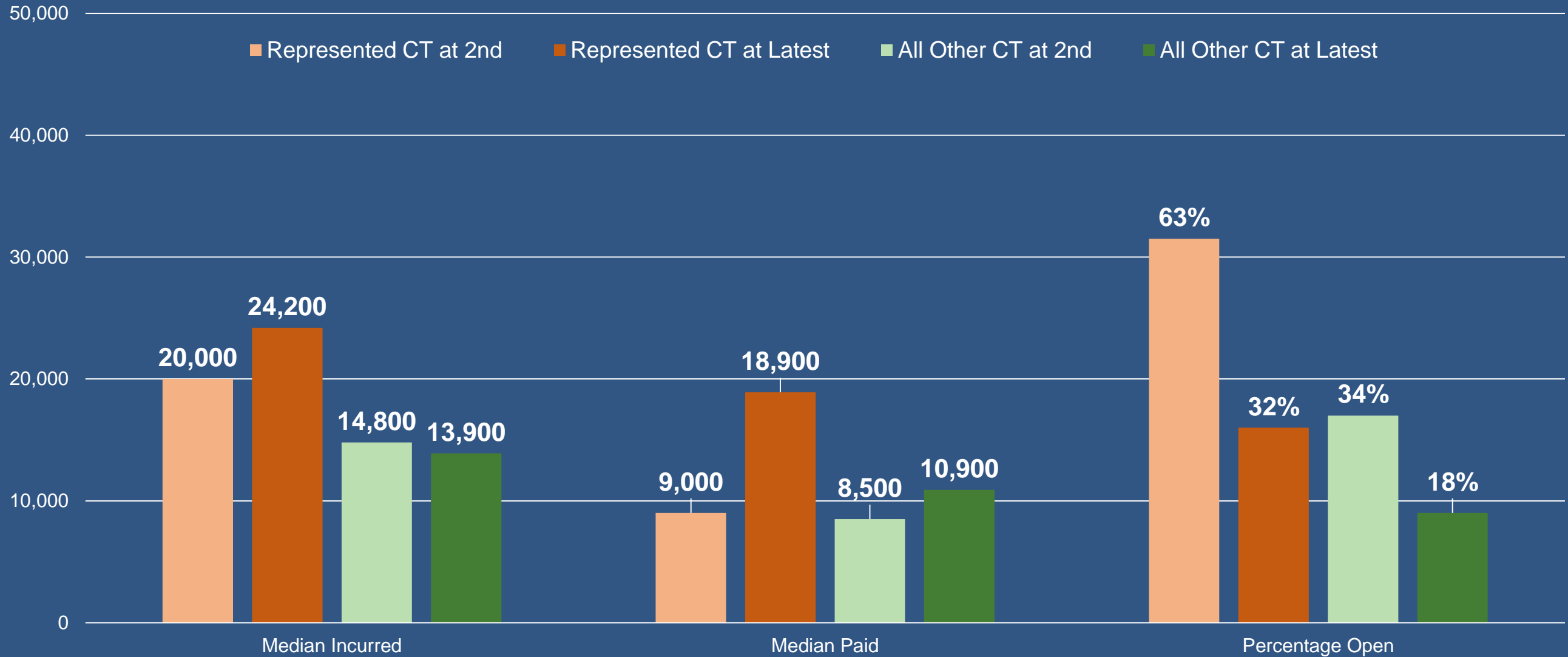
Post-Survey CT Claim Development

Claims with Specific Component for Accident Years 2007-2010



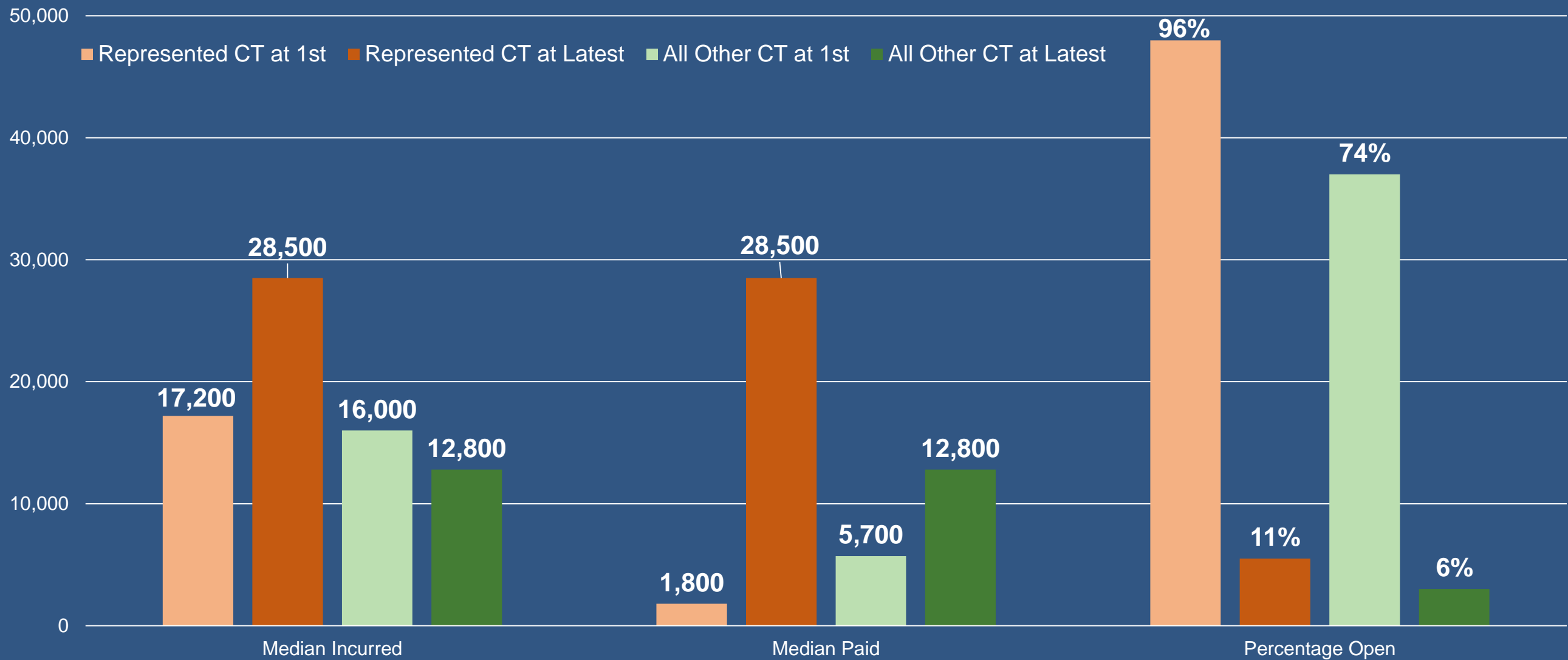
Post-Survey CT Claim Development

Represented Claims for Accident Years 2012-2014

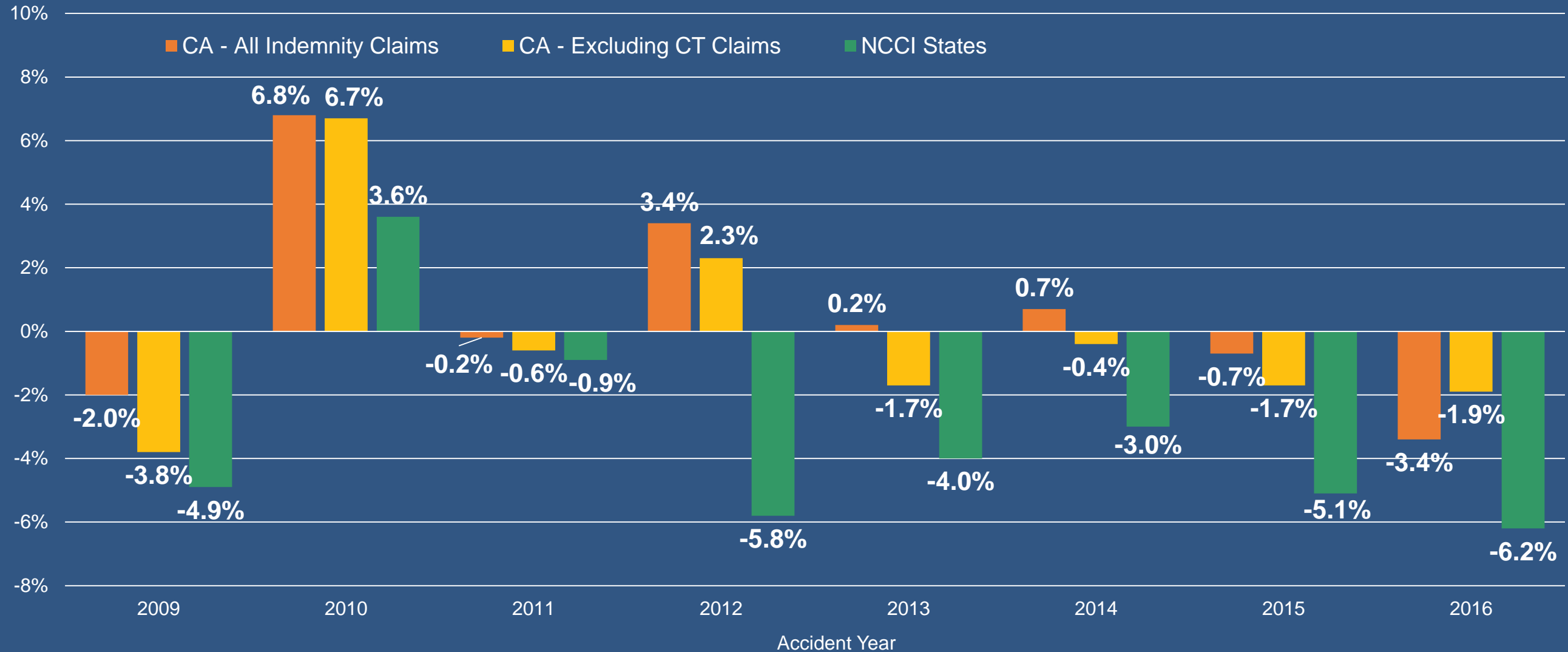


Post-Survey CT Claim Development

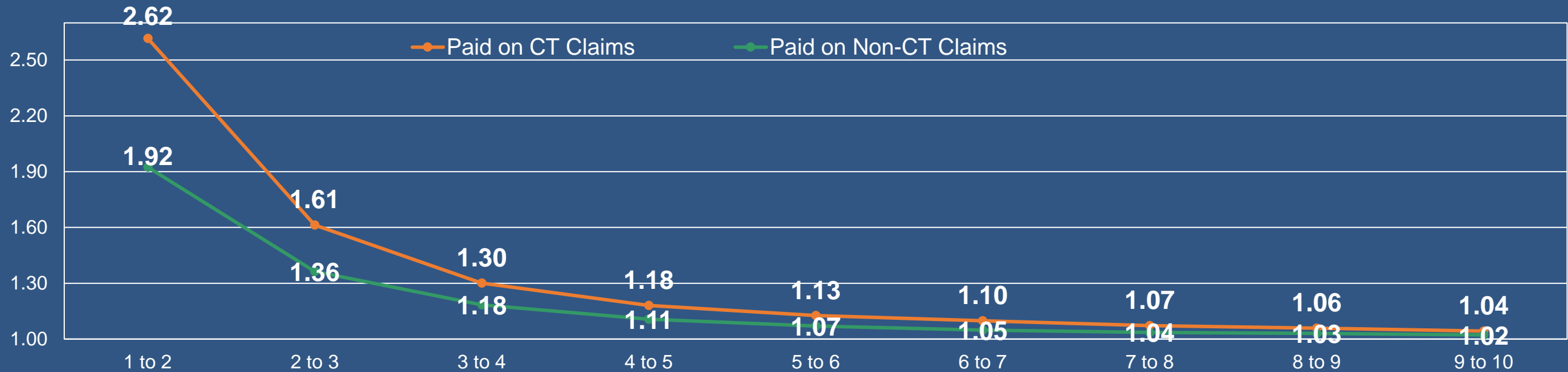
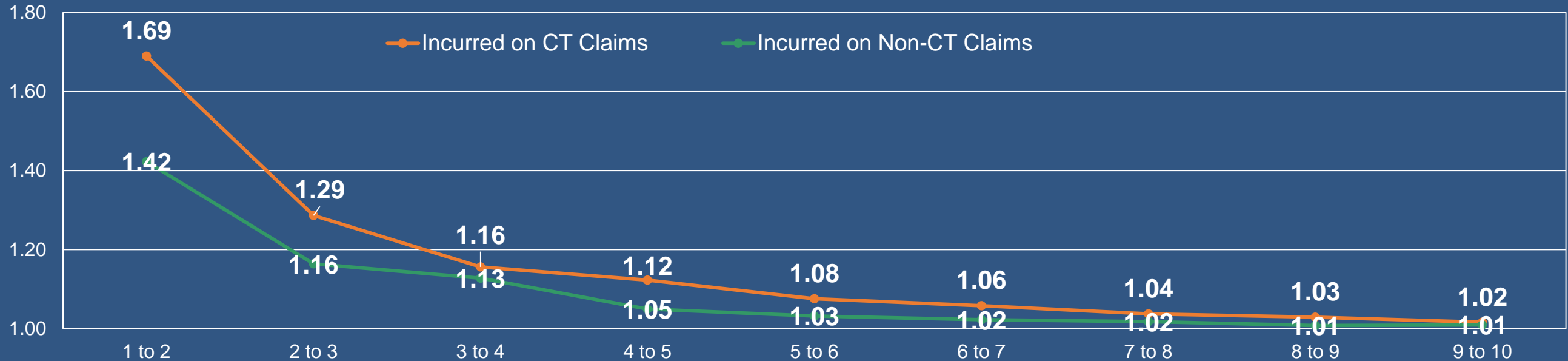
Represented Claims for Accident Years 2007-2010



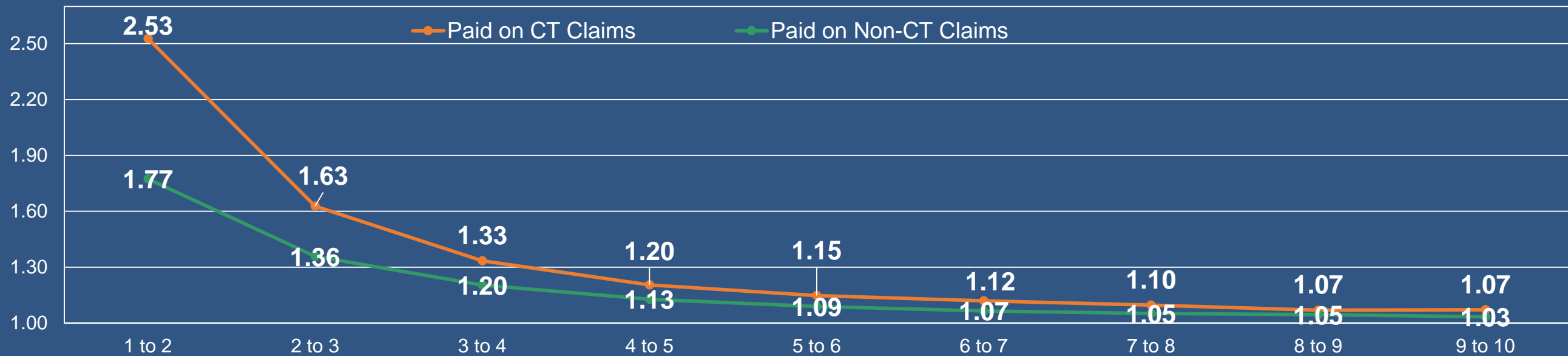
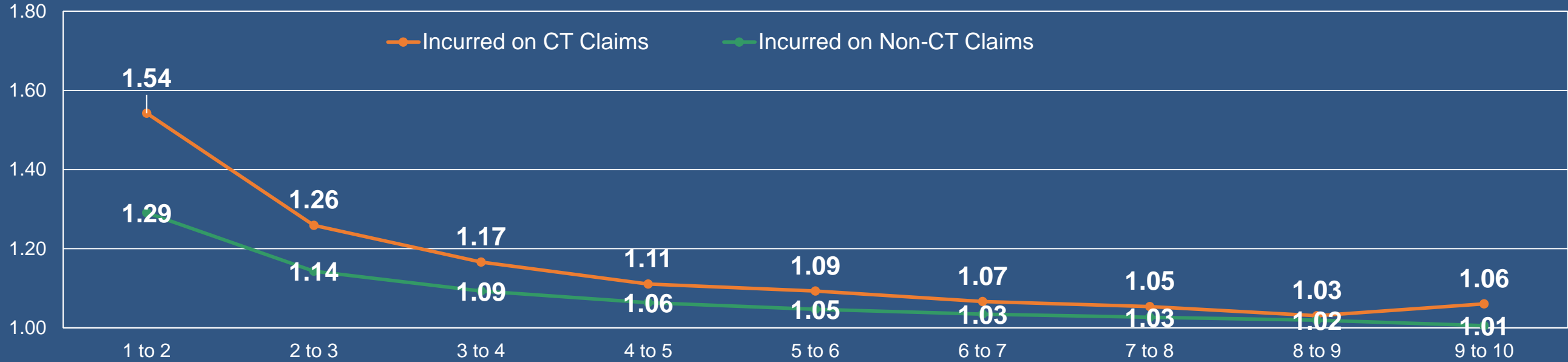
Changes in Indemnity Claim Frequency



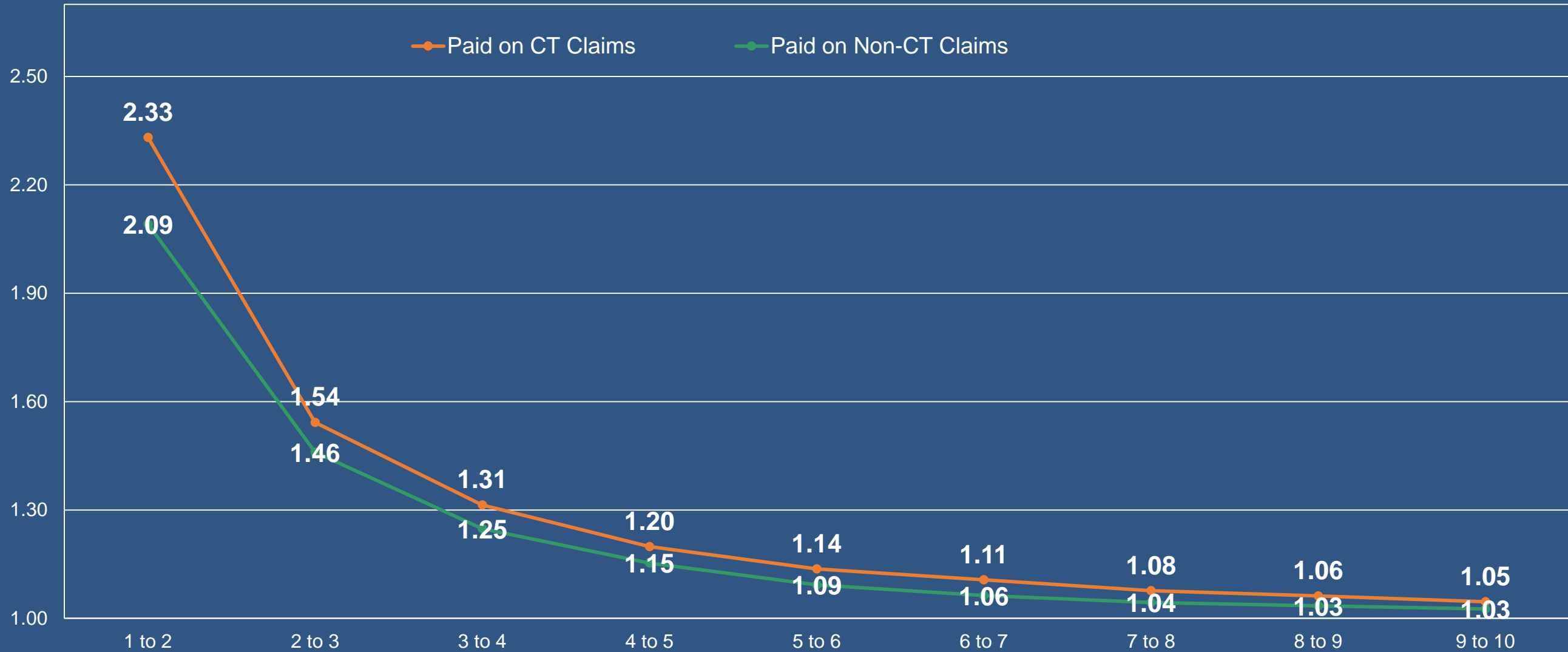
Indemnity Age-to-Age Development



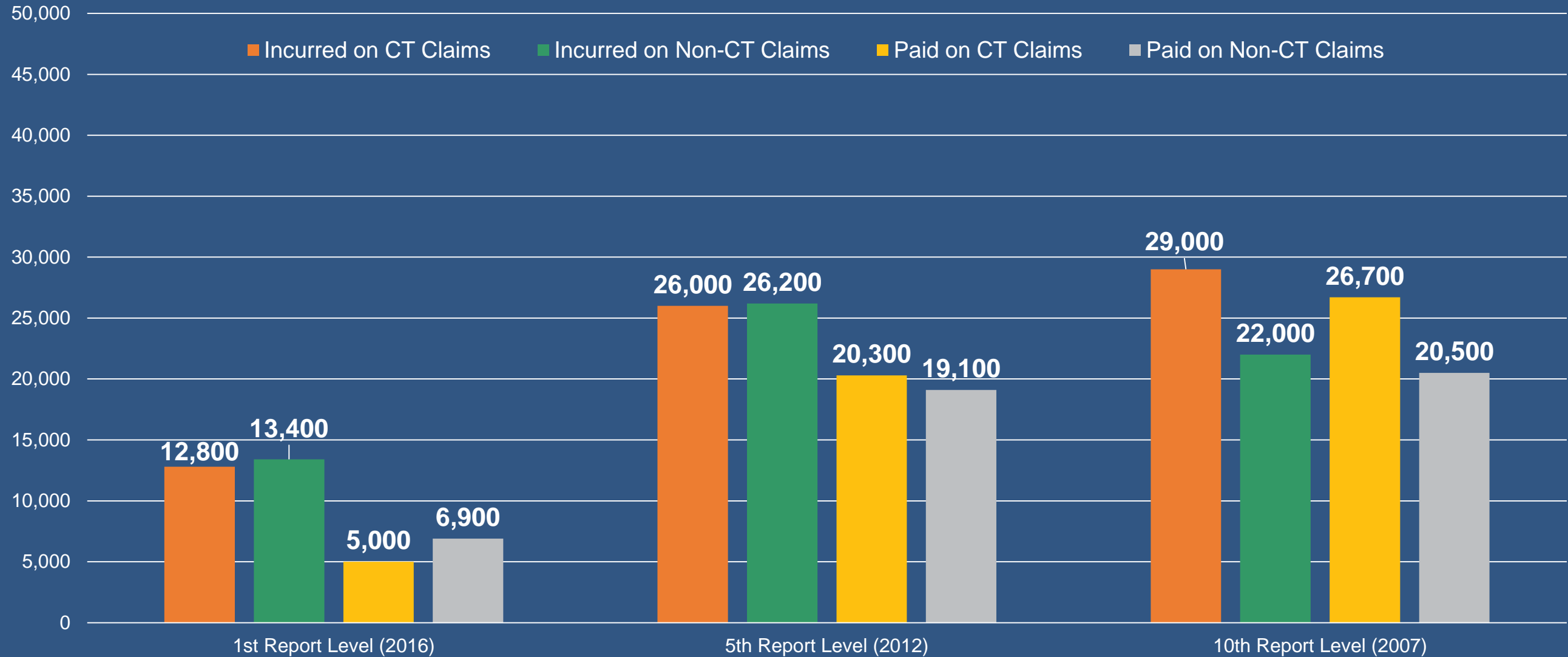
Medical Age-to-Age Development



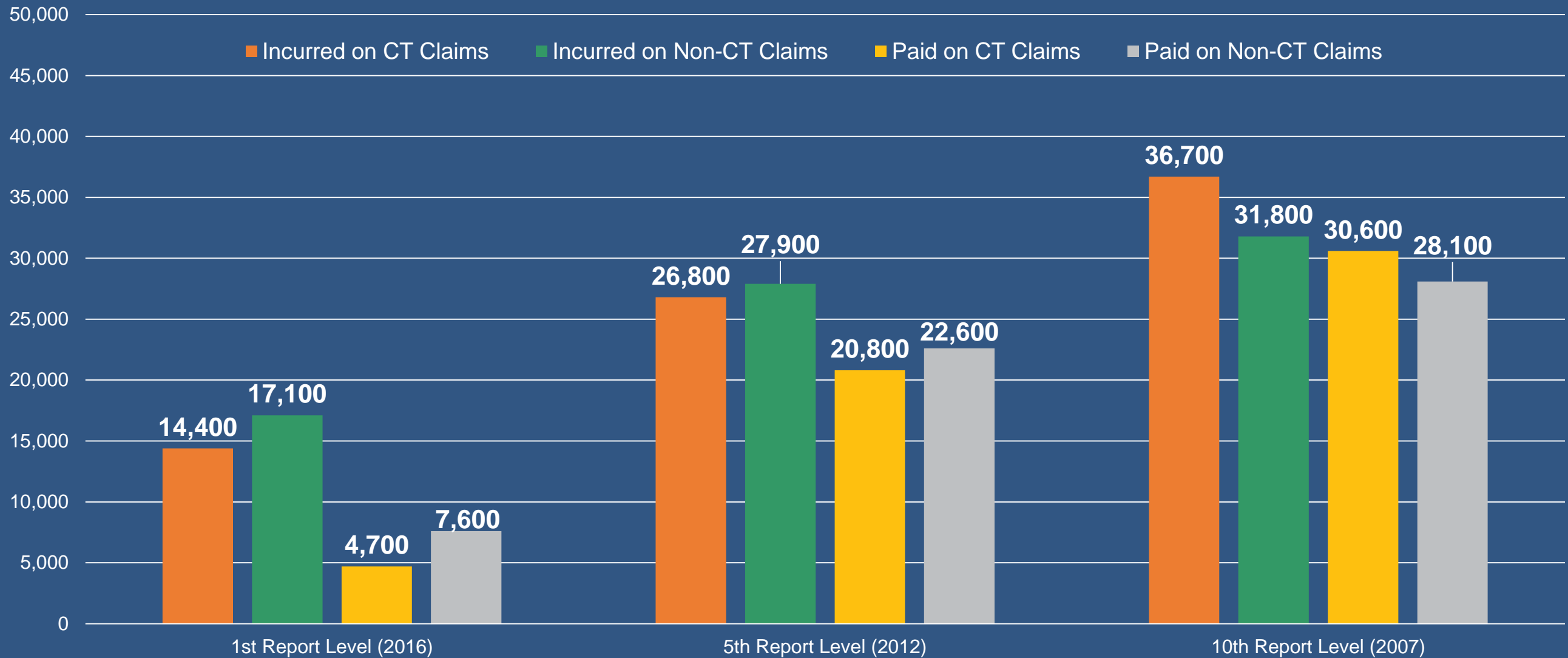
ALAE Age-to-Age Development



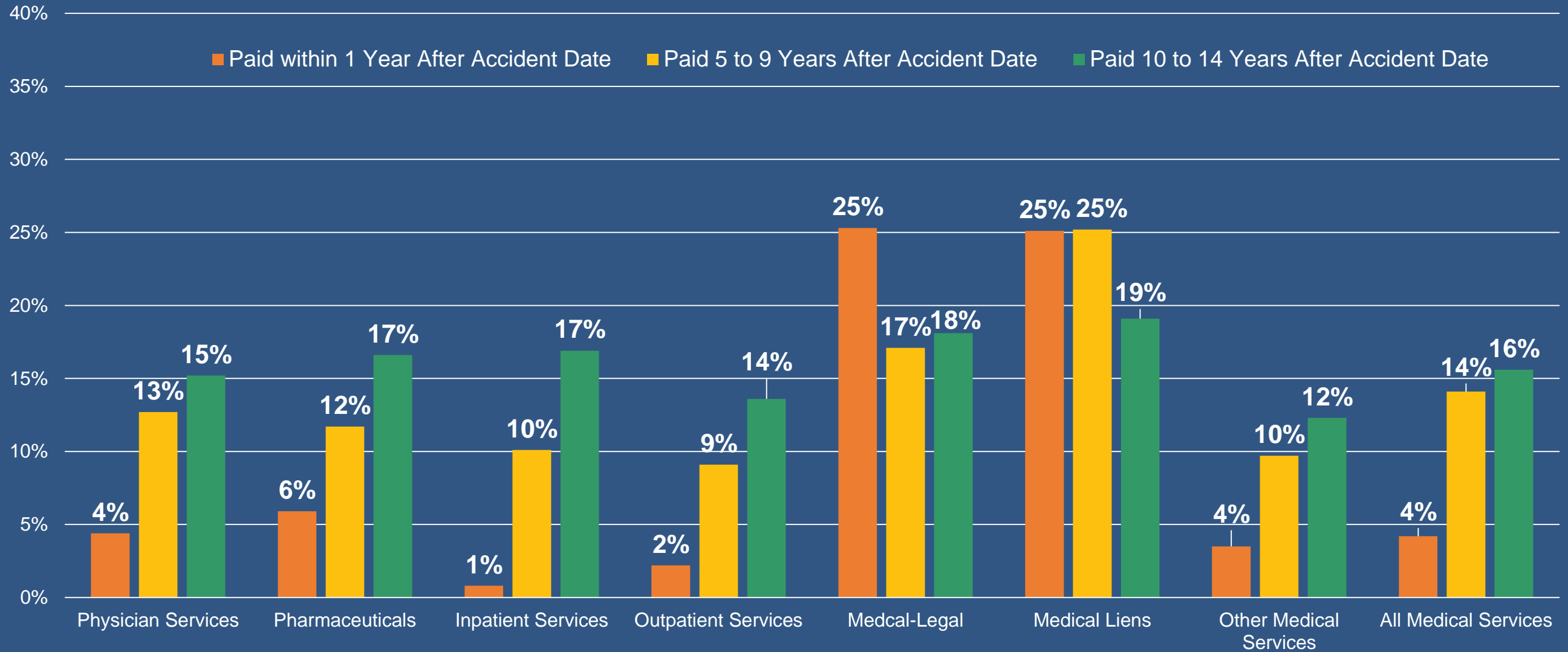
Indemnity Severity Comparison



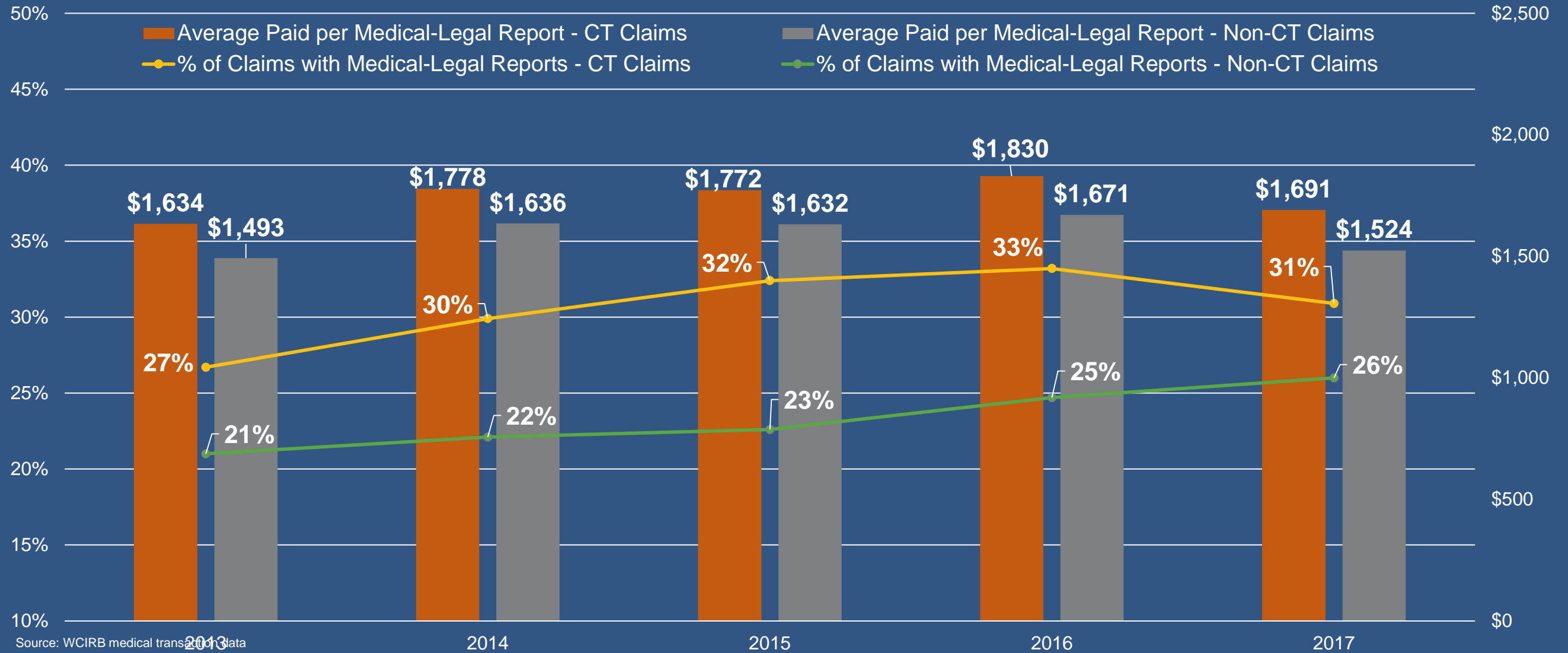
Medical Severity Comparison



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

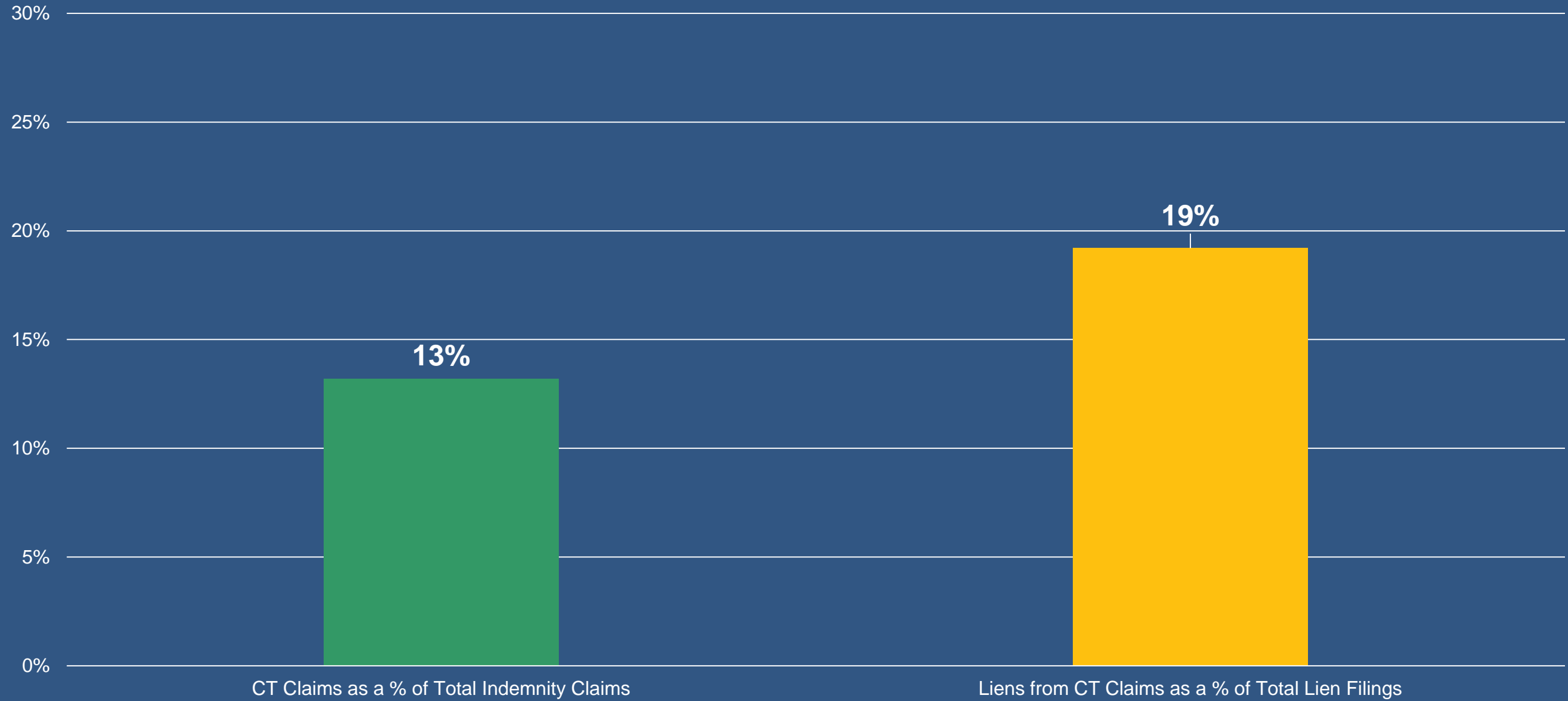


Medical-Legal Cost Trends



Source: WCIRB medical transcripts data

Lien Filings



Top Seven Diagnoses

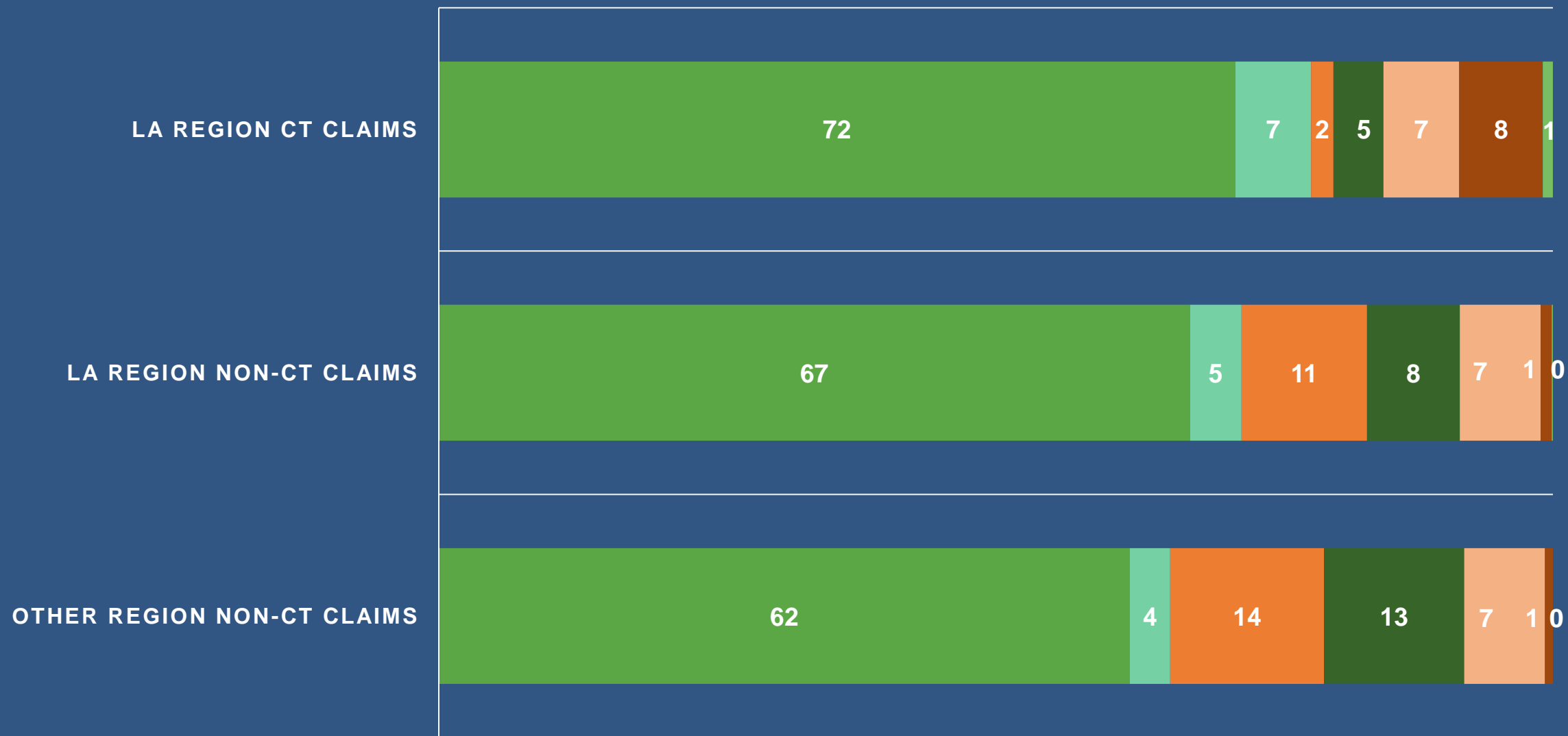
Top 7 Diagnoses for CT Claims	
Diagnosis	Percent of Transactions
Carpal Tunnel Syndrome	9.0%
Neck Sprain	5.7%
Hand/Wrist Tenosynovitis	5.6%
Wrist Sprain	4.2%
Lateral Epicondylitis	3.5%
Shoulder/Arm Sprain	3.2%
Lumbar Region Sprain	3.0%
Top 7	34.2%

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%

Share of Total Medical Payments by Service Type

Accident Years 2013 to 2016 at 1st Development Year

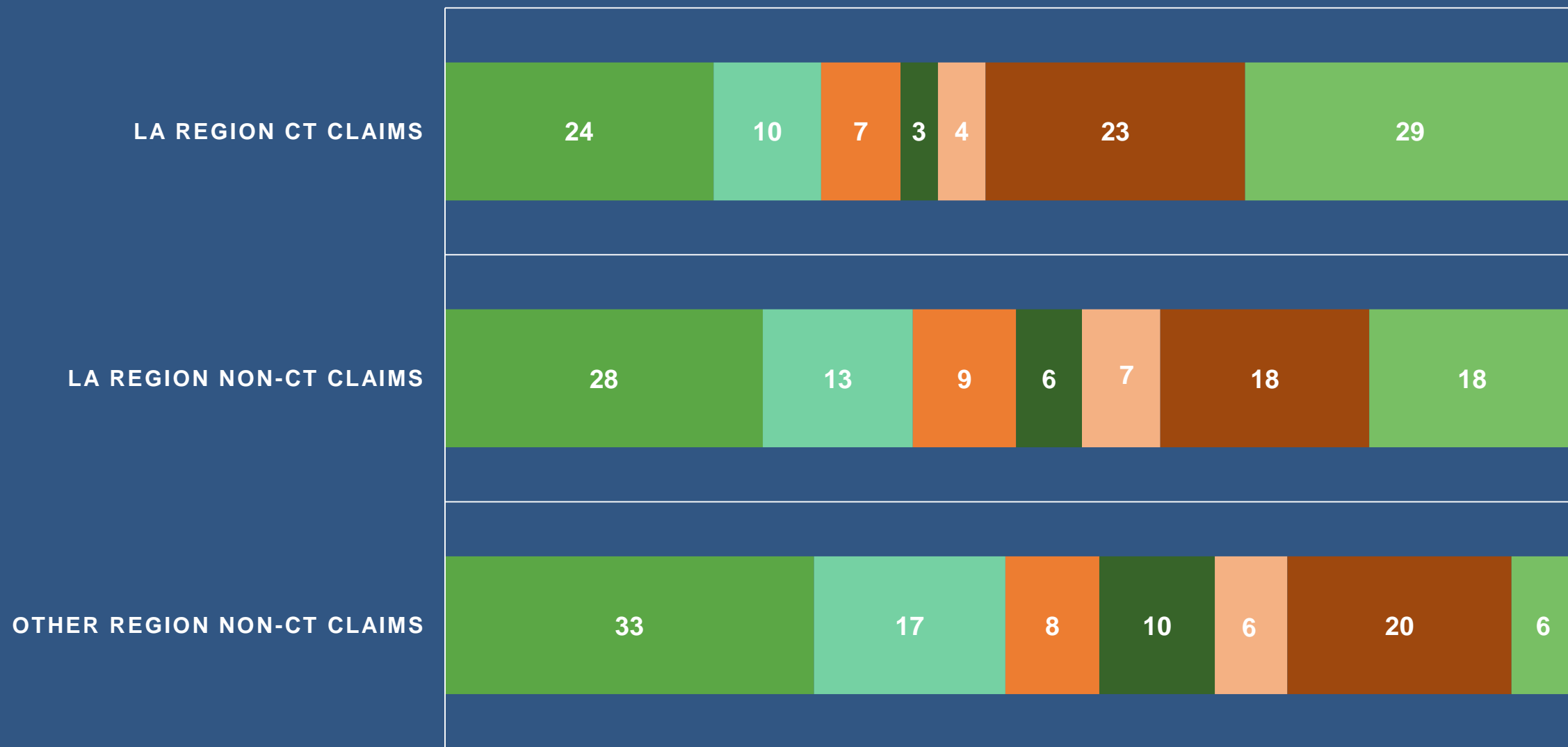
■ Physician Services
 ■ Pharmaceuticals
 ■ Inpatient
 ■ Outpatient
 ■ HCPCS
 ■ Medical Legal
 ■ Medical Lien



Share of Total Medical Payments by Service Type

Accident Years 2009 to 2012 at 5th Development Year

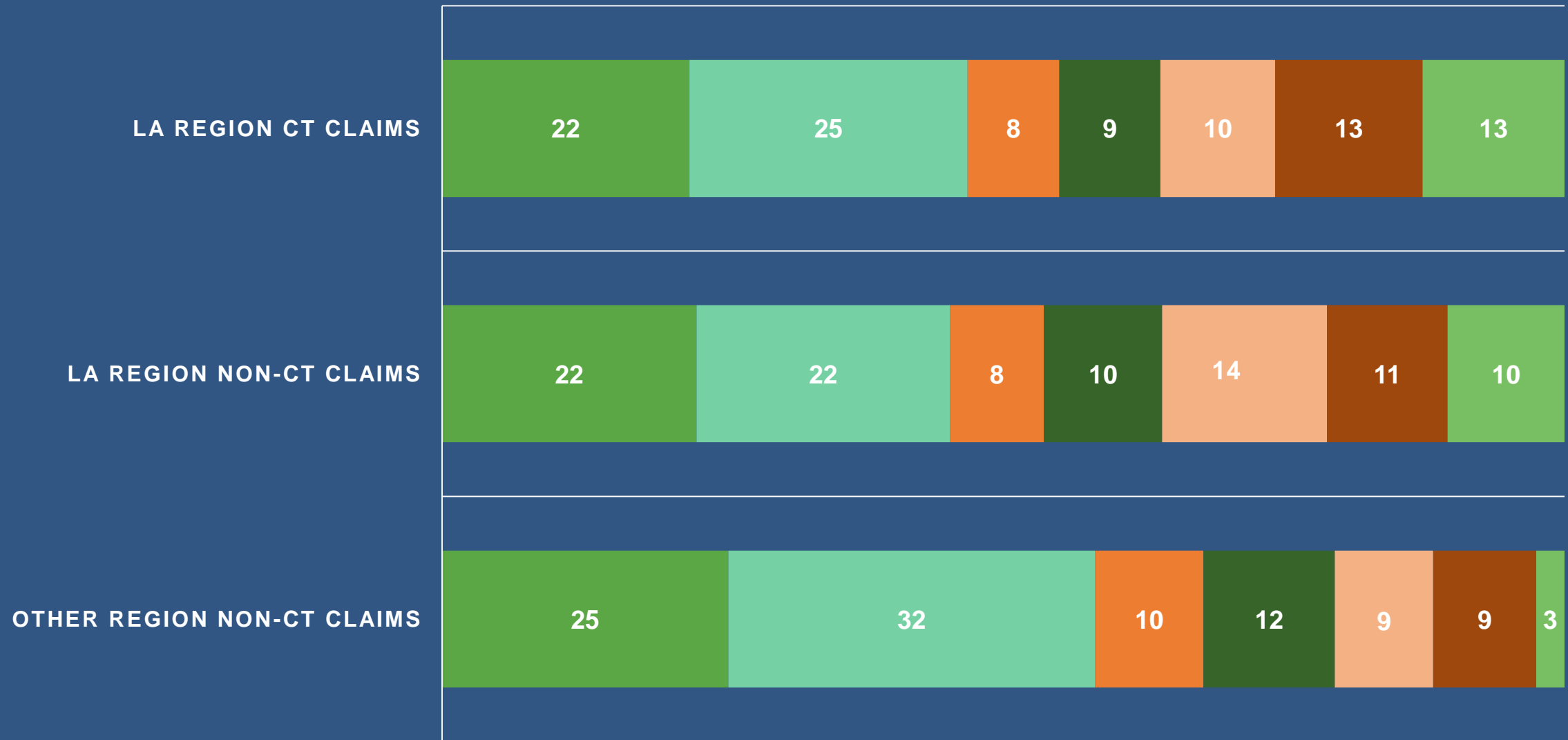
■ Physician Services
 ■ Pharmaceuticals
 ■ Inpatient
 ■ Outpatient
 ■ HCPCS
 ■ Medical Legal
 ■ Medical Lien



Share of Total Medical Payments by Service Type

Accident Years 2004 to 2007 at 10th Development Year

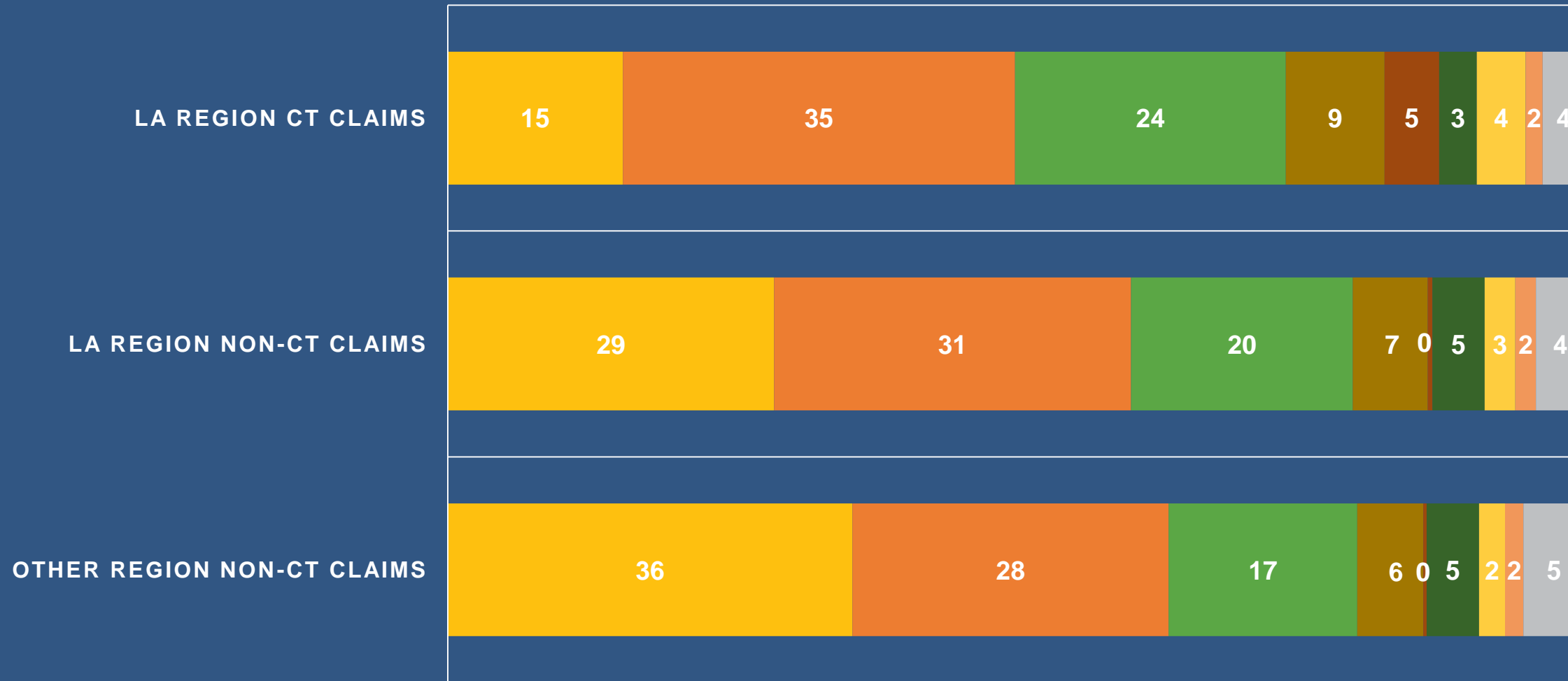
■ Physician Services
 ■ Pharmaceuticals
 ■ Inpatient
 ■ Outpatient
 ■ HCPCS
 ■ Medical Legal
 ■ Medical Lien



Share of Total Medical Payments by Provider Type

Accident Years 2013 to 2016 at 1st Development Year

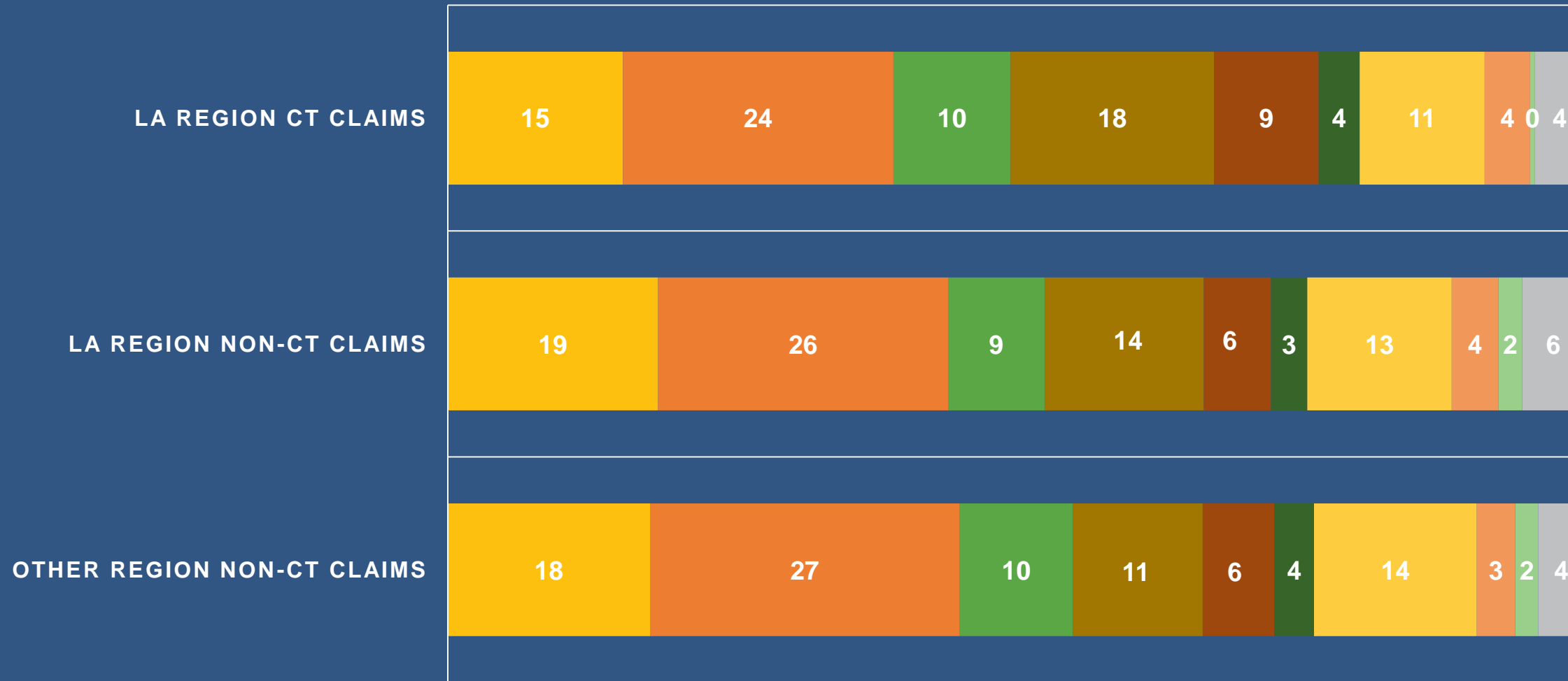
- Hospital
- Specialist/MD
- Physical Medicine
- Surgeon
- Psychiatric
- ASC
- Pharmacist
- DME Provider
- Other



Share of Total Medical Payments by Provider Type

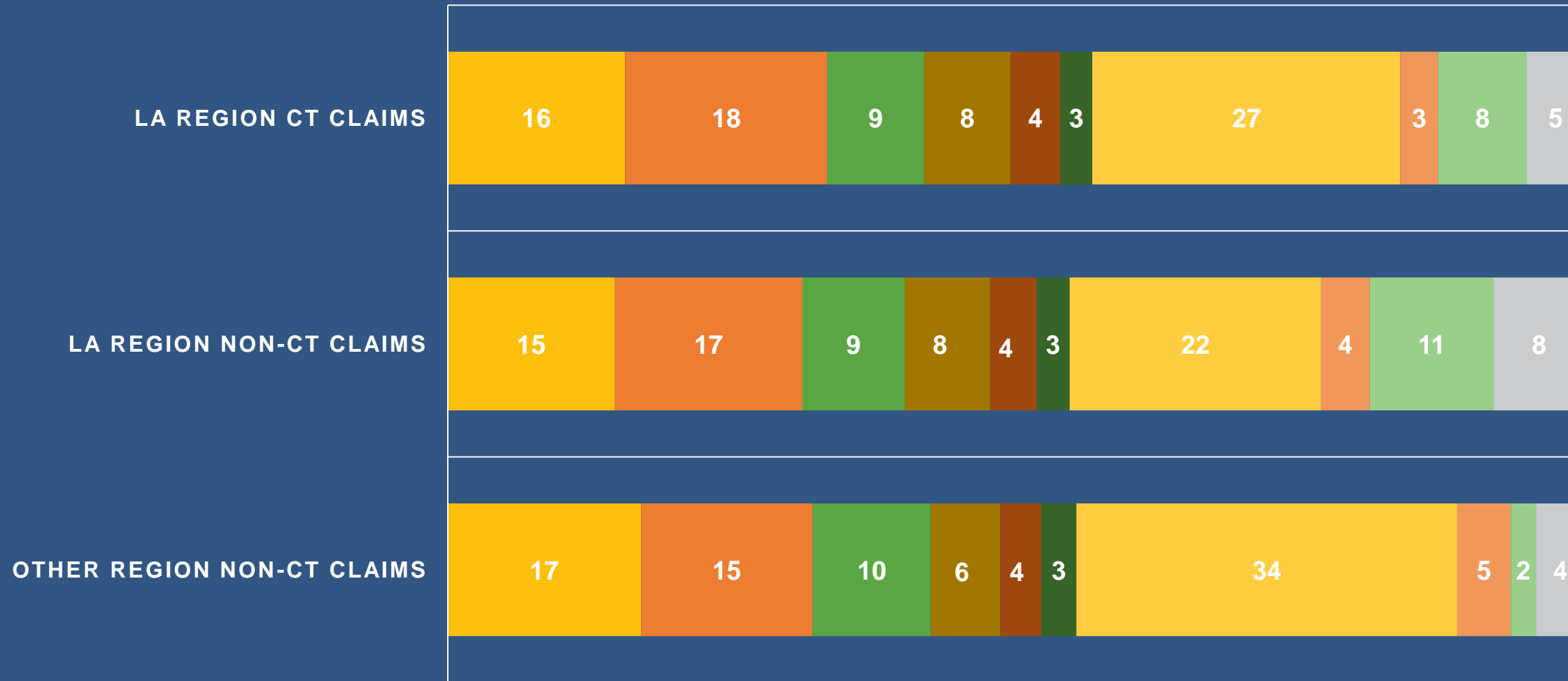
Accident Years 2009 to 2012 at 5th Development Year

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



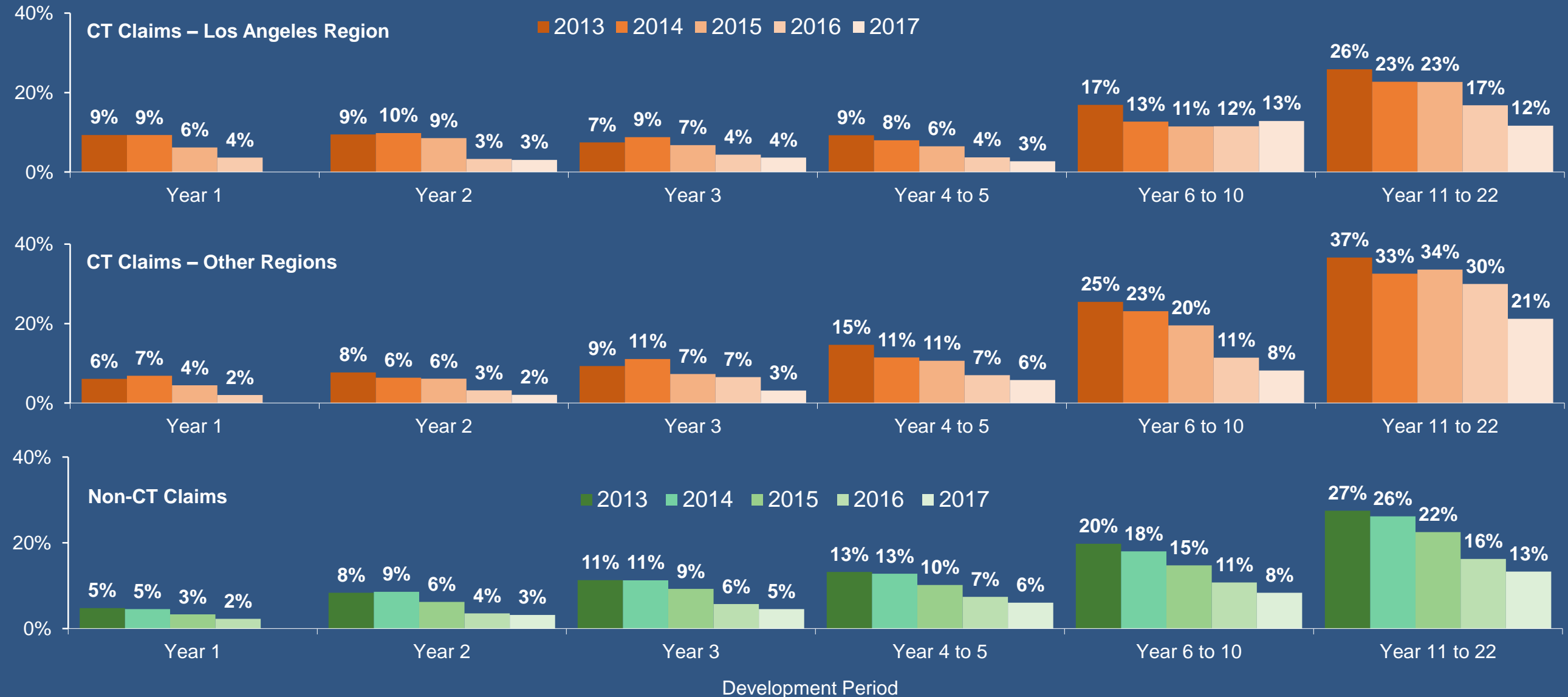
Share of Total Medical Payments by Provider Type

Accident Years 2004 to 2007 at 10th Development Year



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

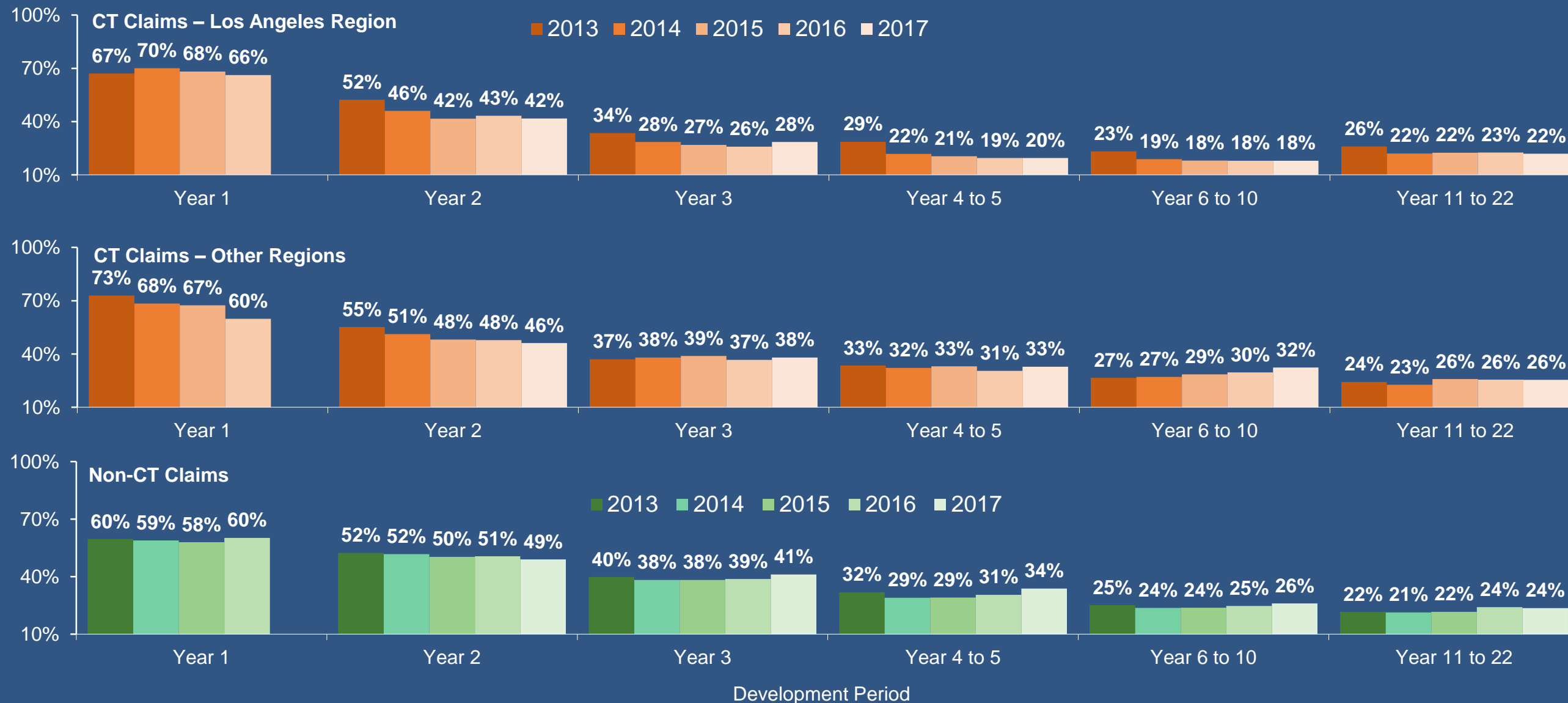
As of December 31, 2017



Share of Total Medical Services Paid by Age and Service Type

Physician Services

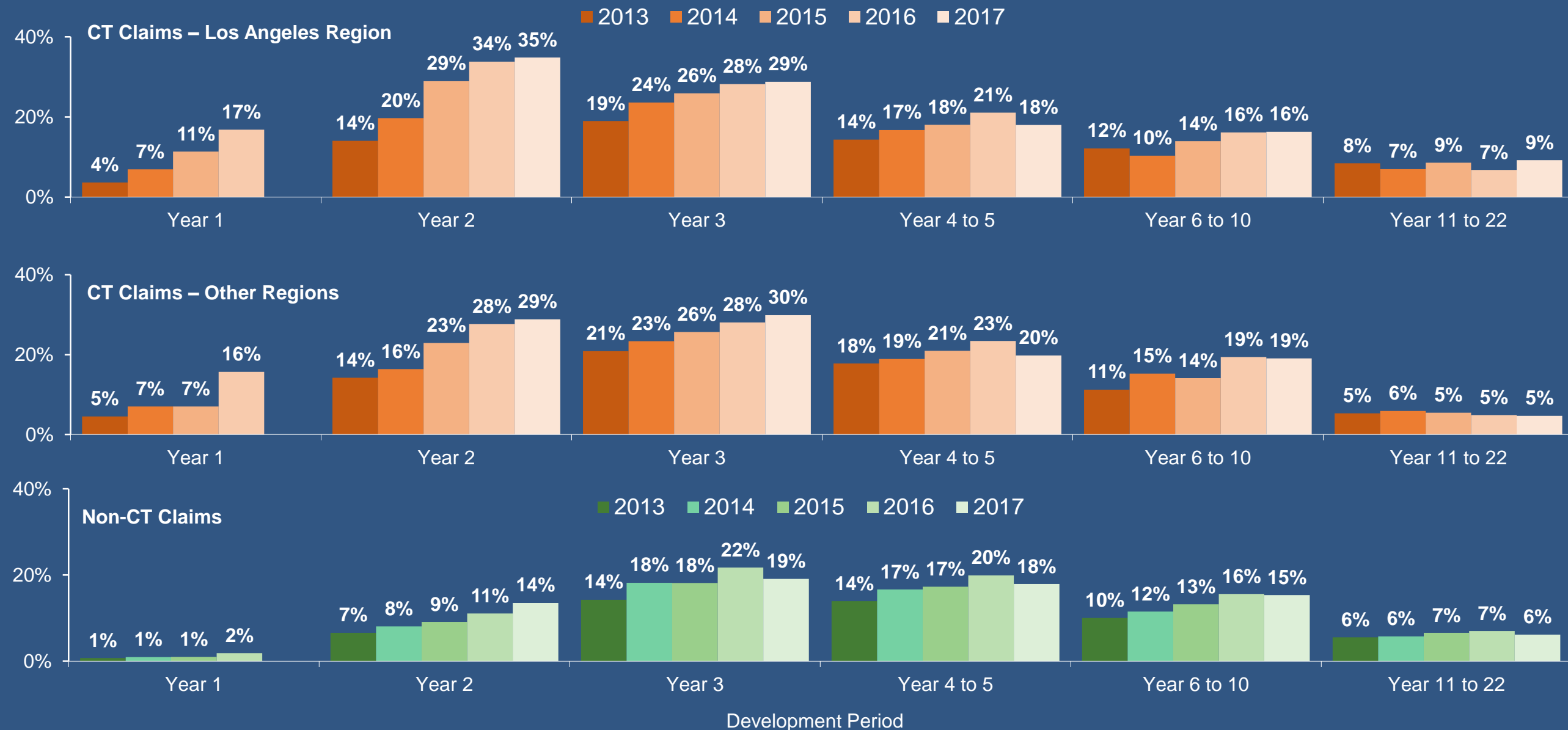
As of December 31, 2017



Share of Total Medical Services Paid by Age and Service Type

Medical-Legal

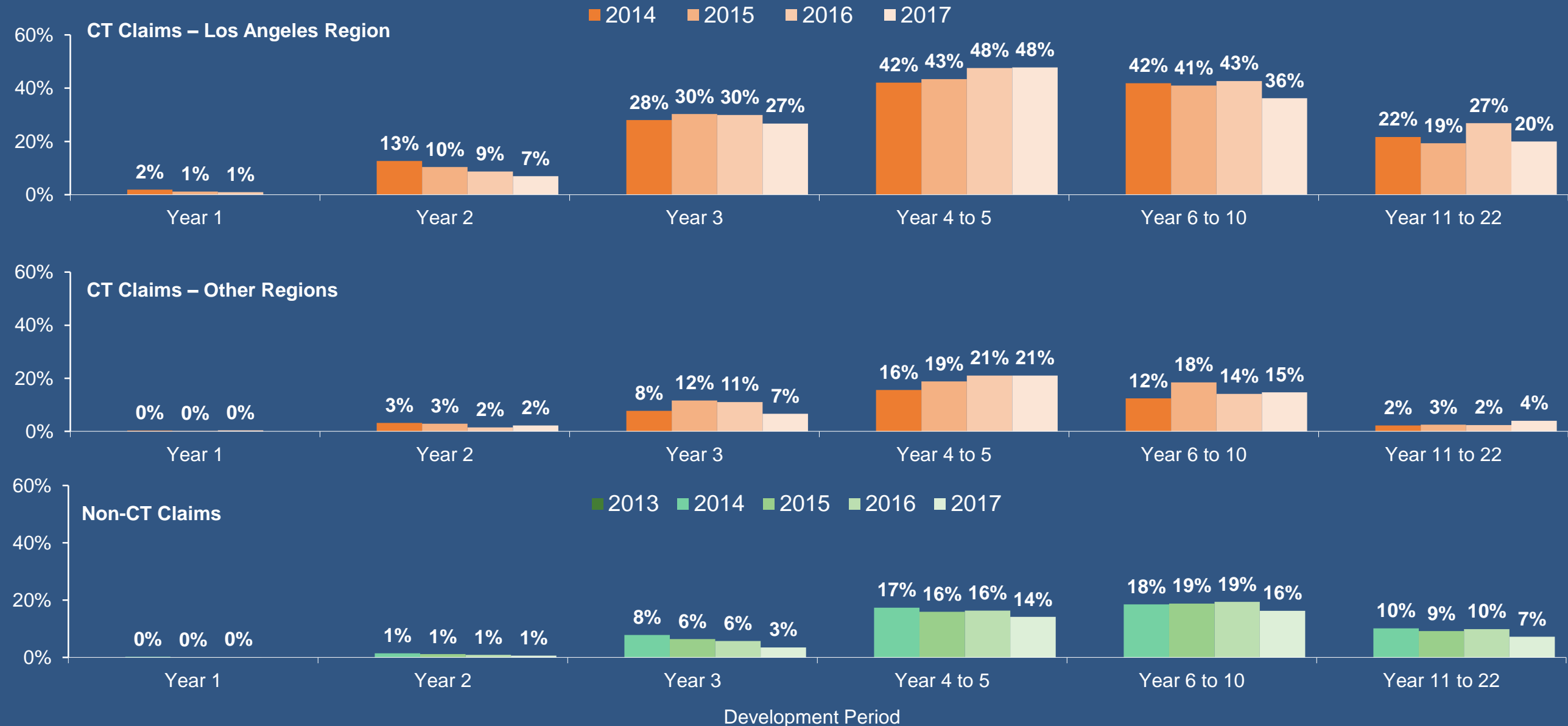
As of December 31, 2017



Share of Total Medical Services Paid by Age and Service Type

Liens

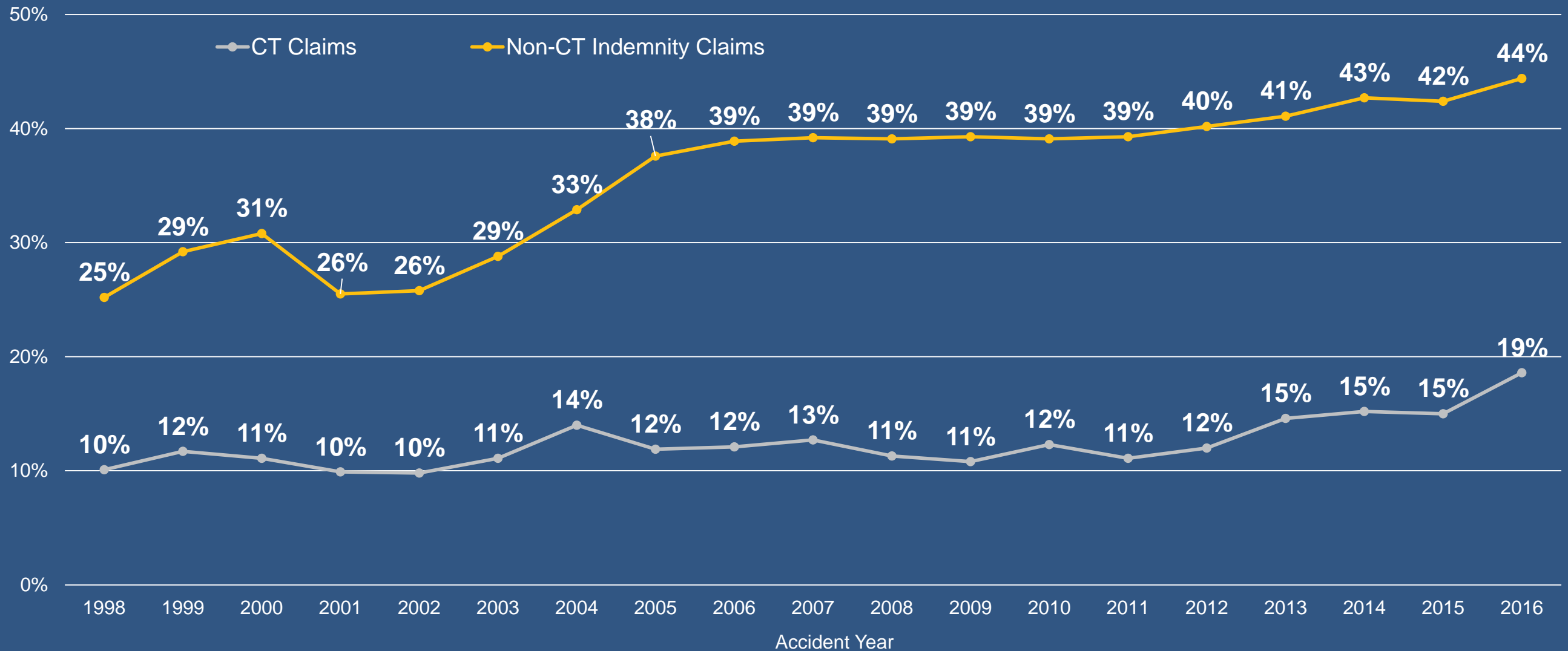
As of December 31, 2017



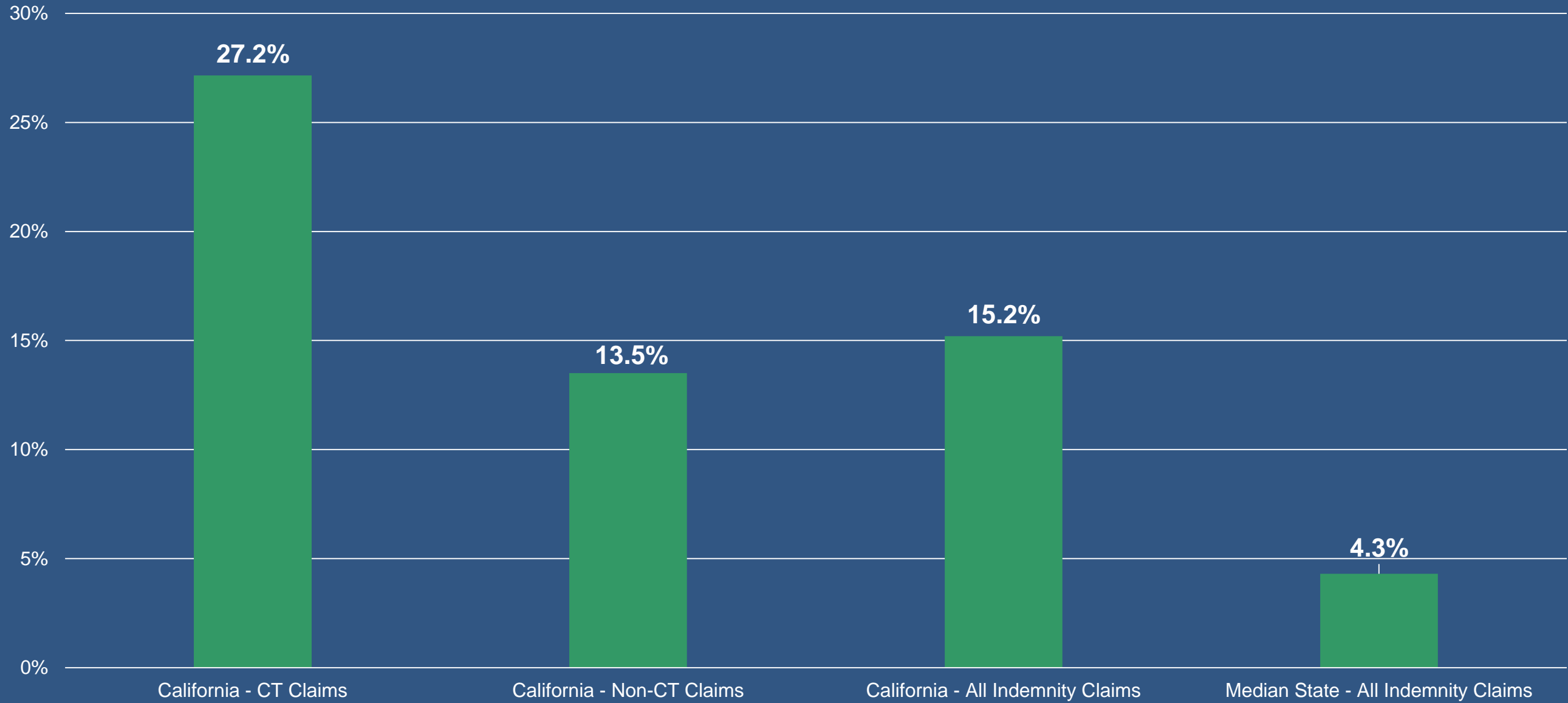
Projected Ultimate ALAE Severities – Private Insurers



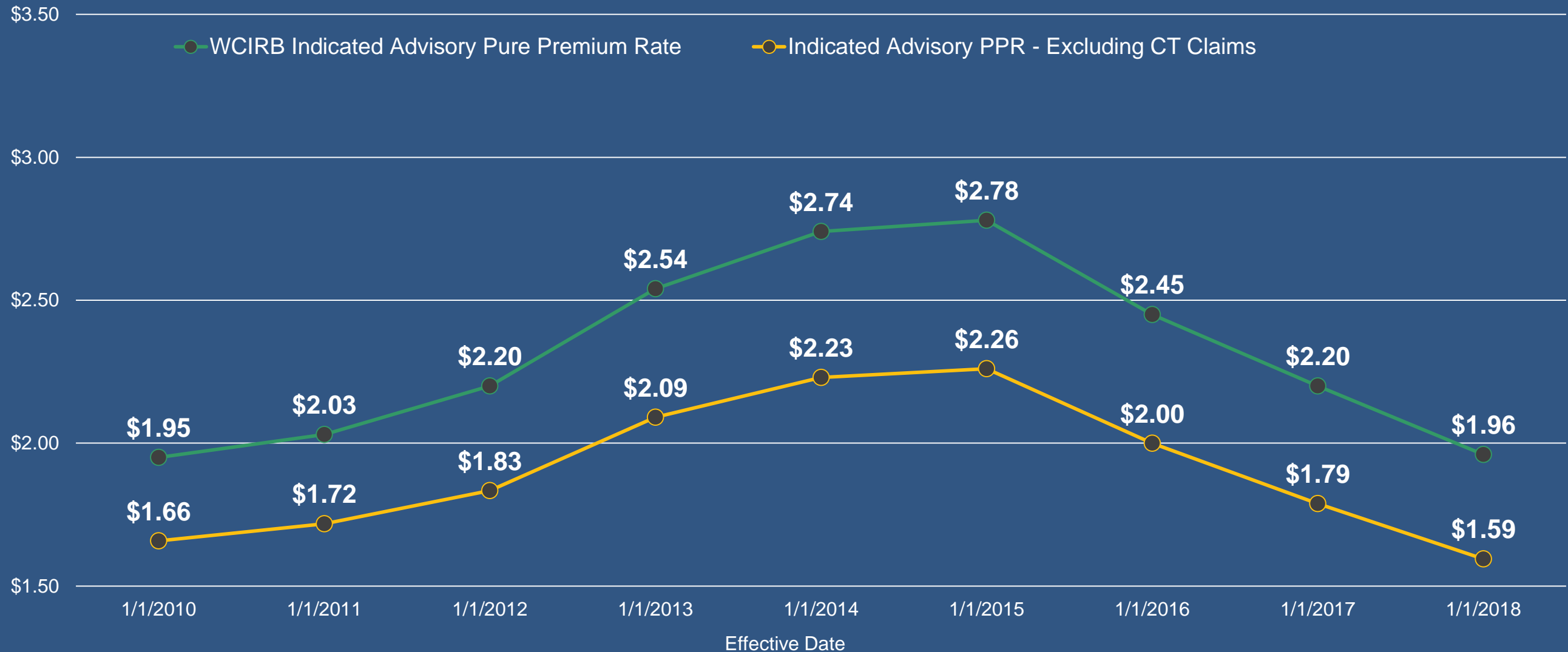
Percent of Ultimate Indemnity Claims Closed at 18 Months



Percent of Indemnity Claims Open at 60 Months



Indicated Average Advisory Pure Premium Rates



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