

# WCIRB Actuarial Committee Meeting

December 5, 2019

# Agenda

1. AC19-12-07: 2020 Schedule of Meetings
2. Medical Analytics Working Group Meeting Summary
3. AC02-03-03: Experience of Large Deductible Policies
4. AC16-06-05: Update on Medical Severity Trends by Component
5. AC18-12-02: Review of Medical On-level Adjustments
6. AC19-12-01: 9/30/2019 Experience – Review of Methodologies
7. AC19-12-02: Review of ULAE Projection Methods
8. AC19-12-03: Update on Wage Report
9. AC19-12-04: Assembly Bill No. 5
10. AC19-12-05: Review of Incremental Loss Development Methods
11. AC19-12-06: Potential 2020 Actuarial and Research Projects

## NOTICE & COPYRIGHT

This presentation was developed by the Workers' Compensation Insurance Rating Bureau of California (WCIRB) for informational purposes only. The WCIRB shall not be liable for any damages of any kind, whether direct, indirect, incidental, punitive or consequential, arising from the use, inability to use, or reliance upon information provided in this presentation.

© 2019 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 by federal copyright law. No copyright is claimed in the text of statutes and regulations quoted within this work.

Each WCIRB member company (Company) is authorized to reproduce any part of this work solely for the purpose of transacting workers' compensation insurance. This reproduction right does not include the right to make any part of this work available on any website or on any form of social media.

Workers' Compensation Insurance Rating Bureau of California, WCIRB, WCIRB California, WCIRB Connect, WCIRB CompEssentials, X-Mod Direct, eSCAD, Comprehensive Risk Summary, X-Mods and More 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 Workers' Compensation Insurance Rating Bureau of California at [customerservice@wcirb.com](mailto:customerservice@wcirb.com).

# 01

## 2020 Schedule of Meetings



# Proposed 2020 Schedule of Meetings

Monday, March 16, 2020

Thursday, April 2, 2020

Friday, June 12, 2020

Tuesday, August 4, 2020

Tuesday, September 1, 2020

Tuesday, December 8, 2020

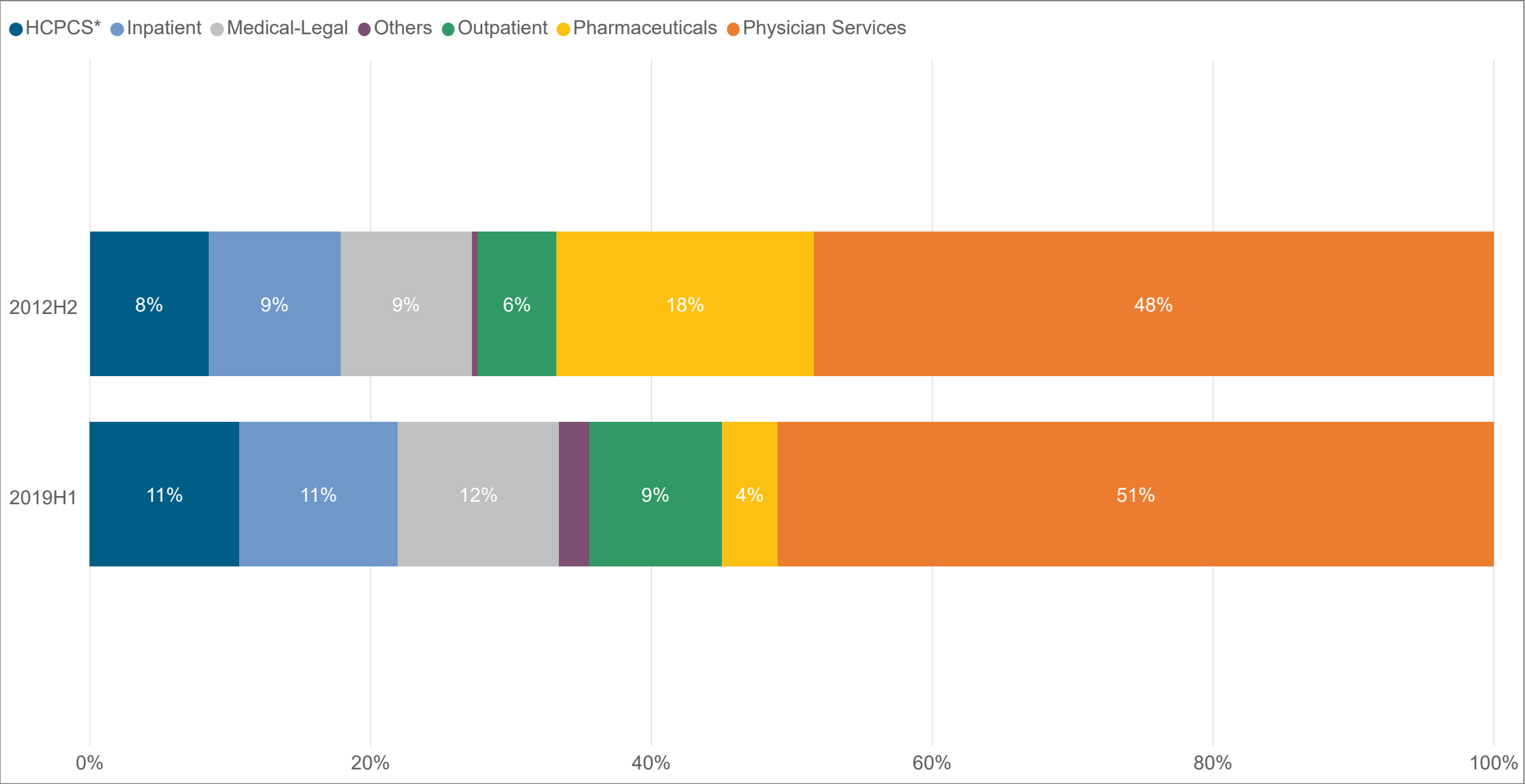
# 02

## Medical Analytics Working Group Meeting Summary



# Share of Total Medical Payments by Service Type

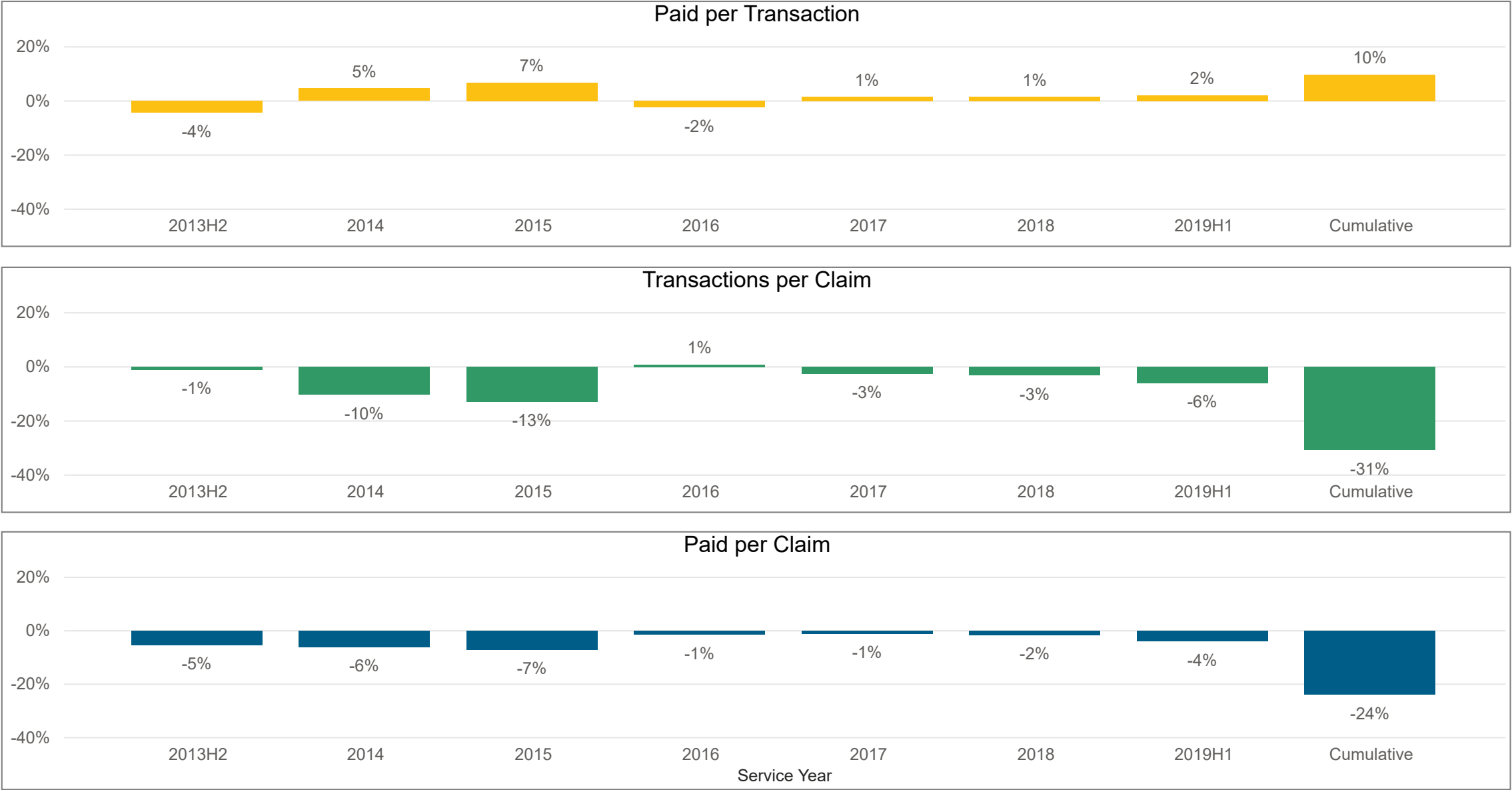
As of October 7, 2019



Source: WCIRB medical transaction data collected beginning in the third quarter of 2012.  
\* HCPCS stands for Healthcare Common Procedure Coding System. HCPCS codes primarily include ambulance services, durable medical equipment, prosthetics, orthotics, and supplies used outside a physician’s office, home health services, and interpreter services.

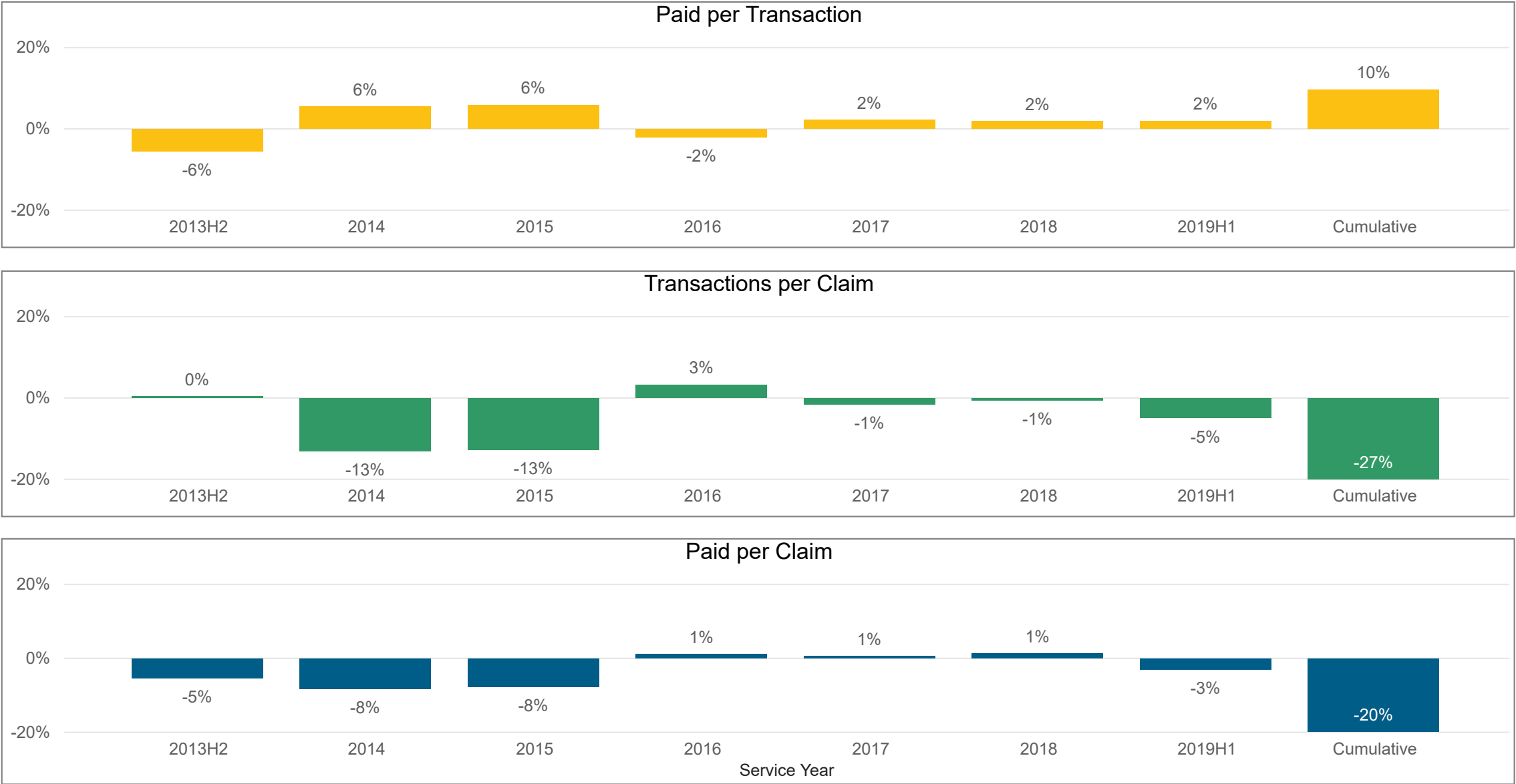
# % Change in *All Medical Services* Cost per Claim

As of October 7, 2019



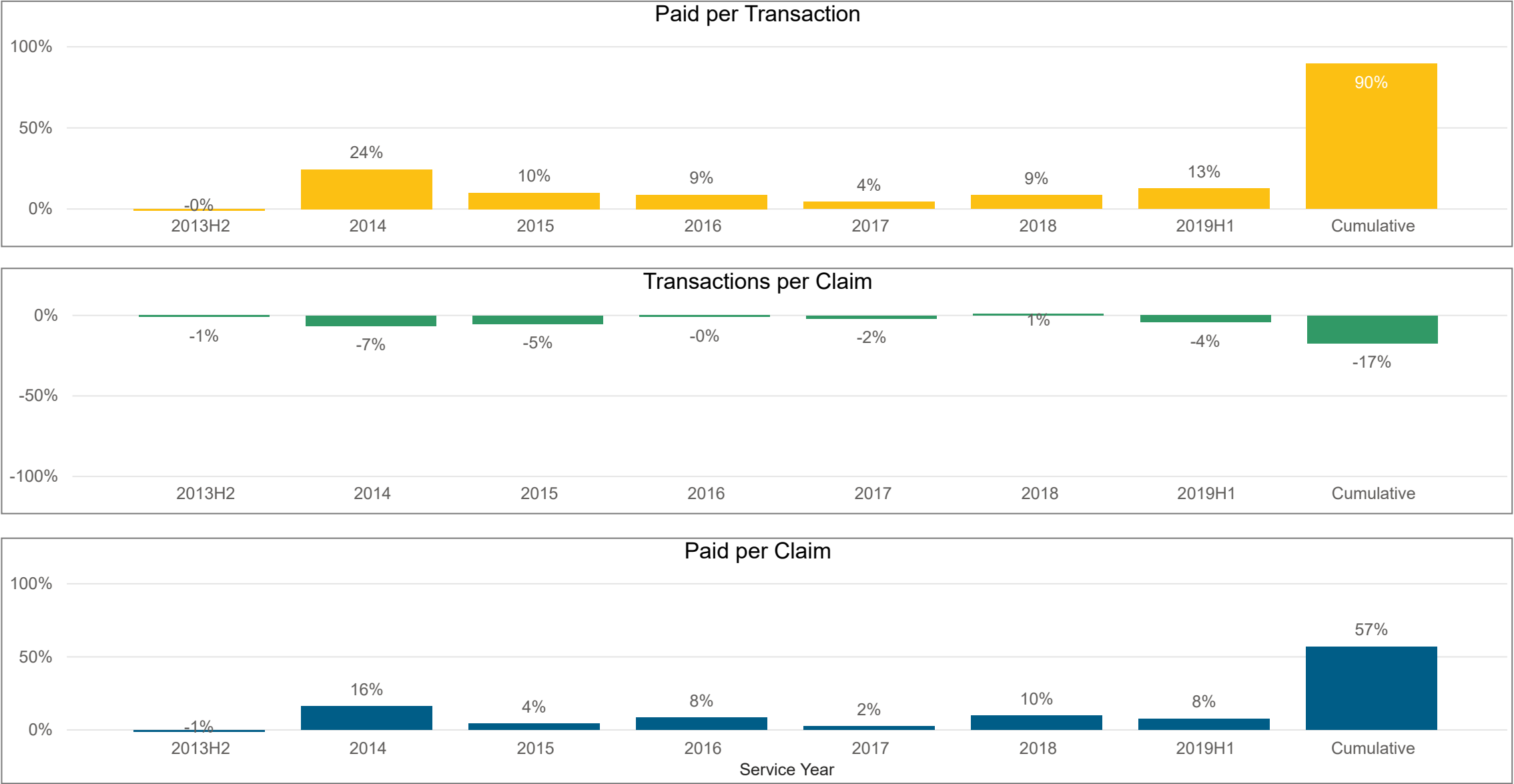
# % Change in *Physician Services* Cost per Claim (51% of All Medical Payments)

As of October 7, 2019



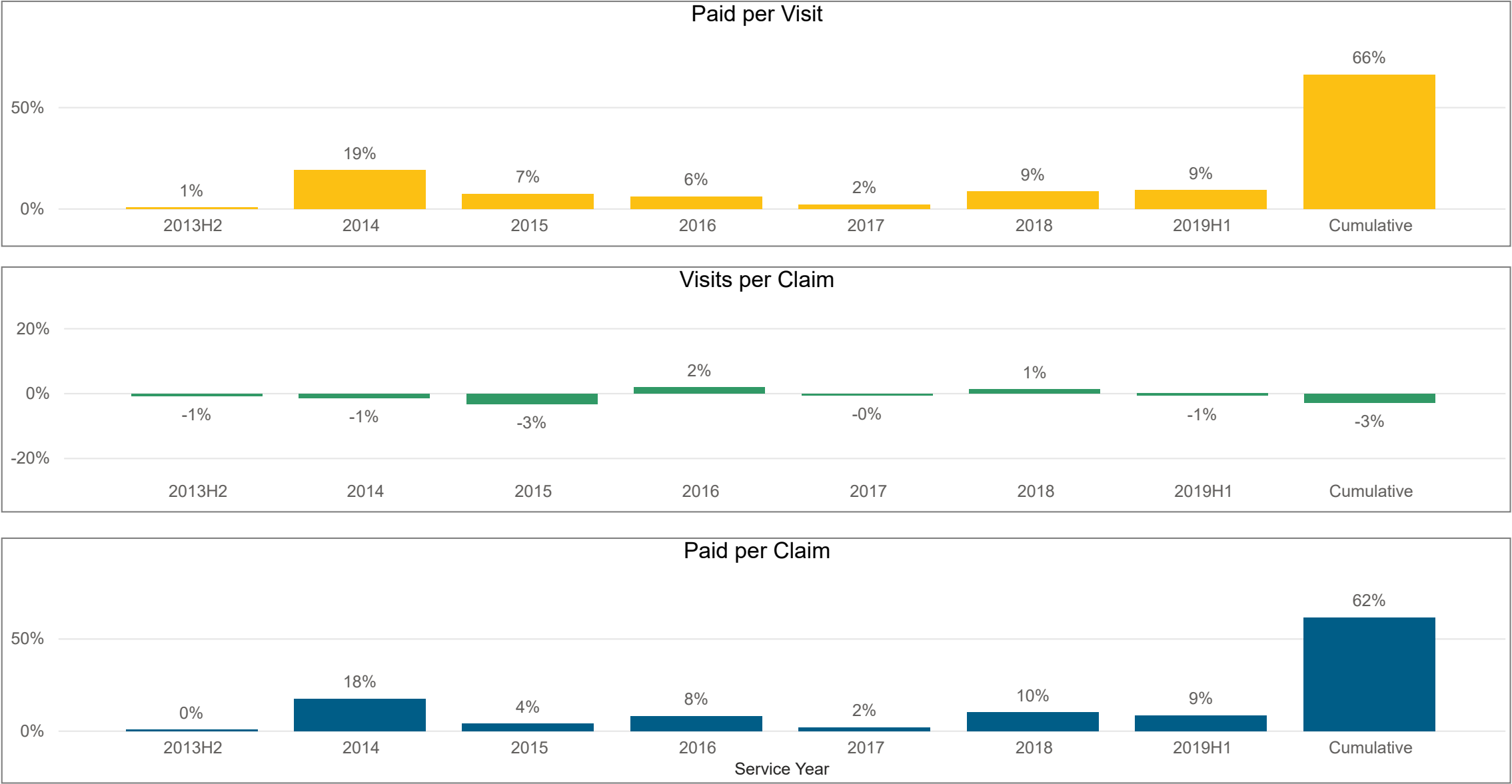
# % Change in *Physical Medicine* Cost per Claim (15% of All Medical Payments)

As of October 7, 2019



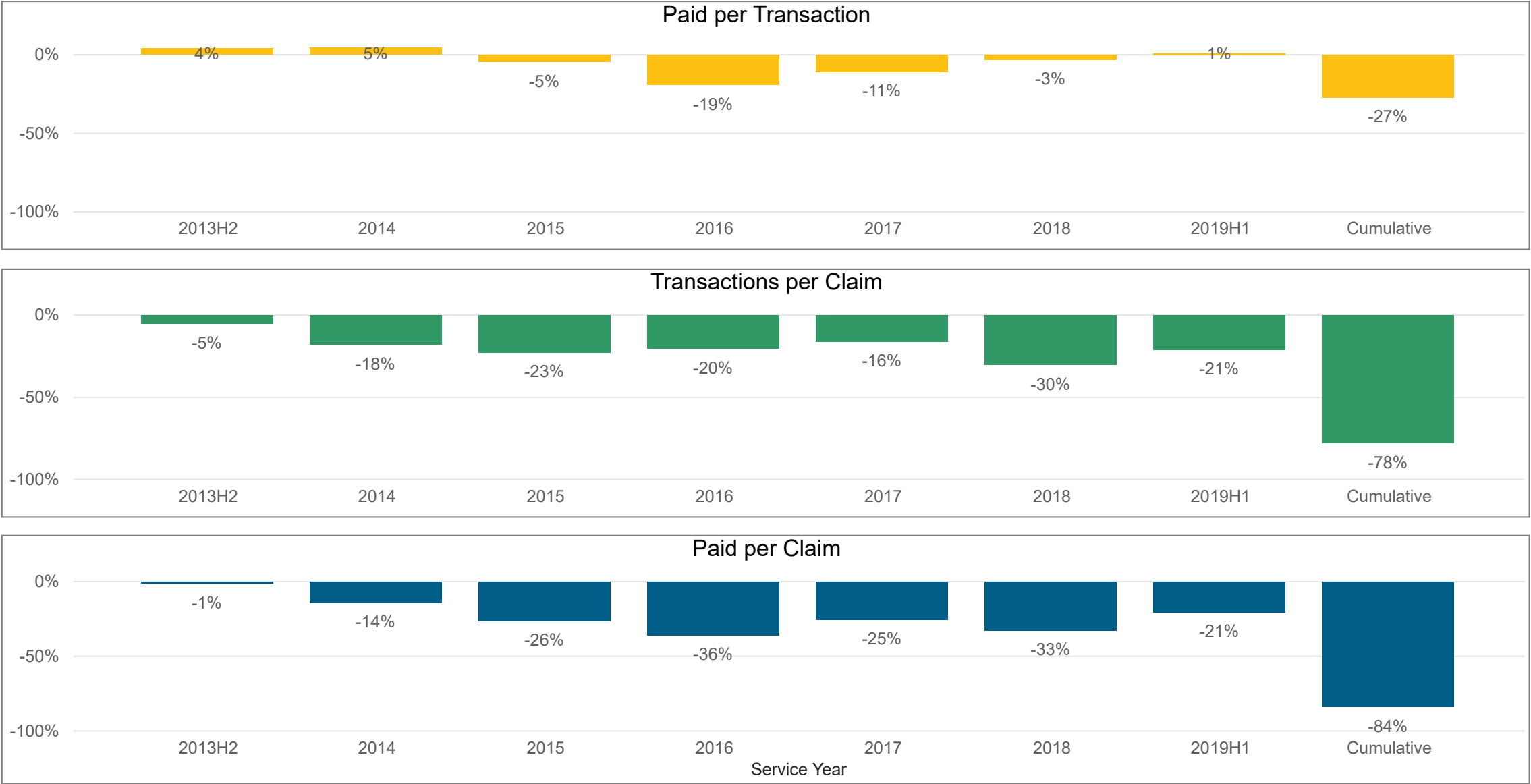
# % Change in *Physical Therapy* Cost per Claim (visit-based) (14% of All Medical Payments)

As of October 7, 2019



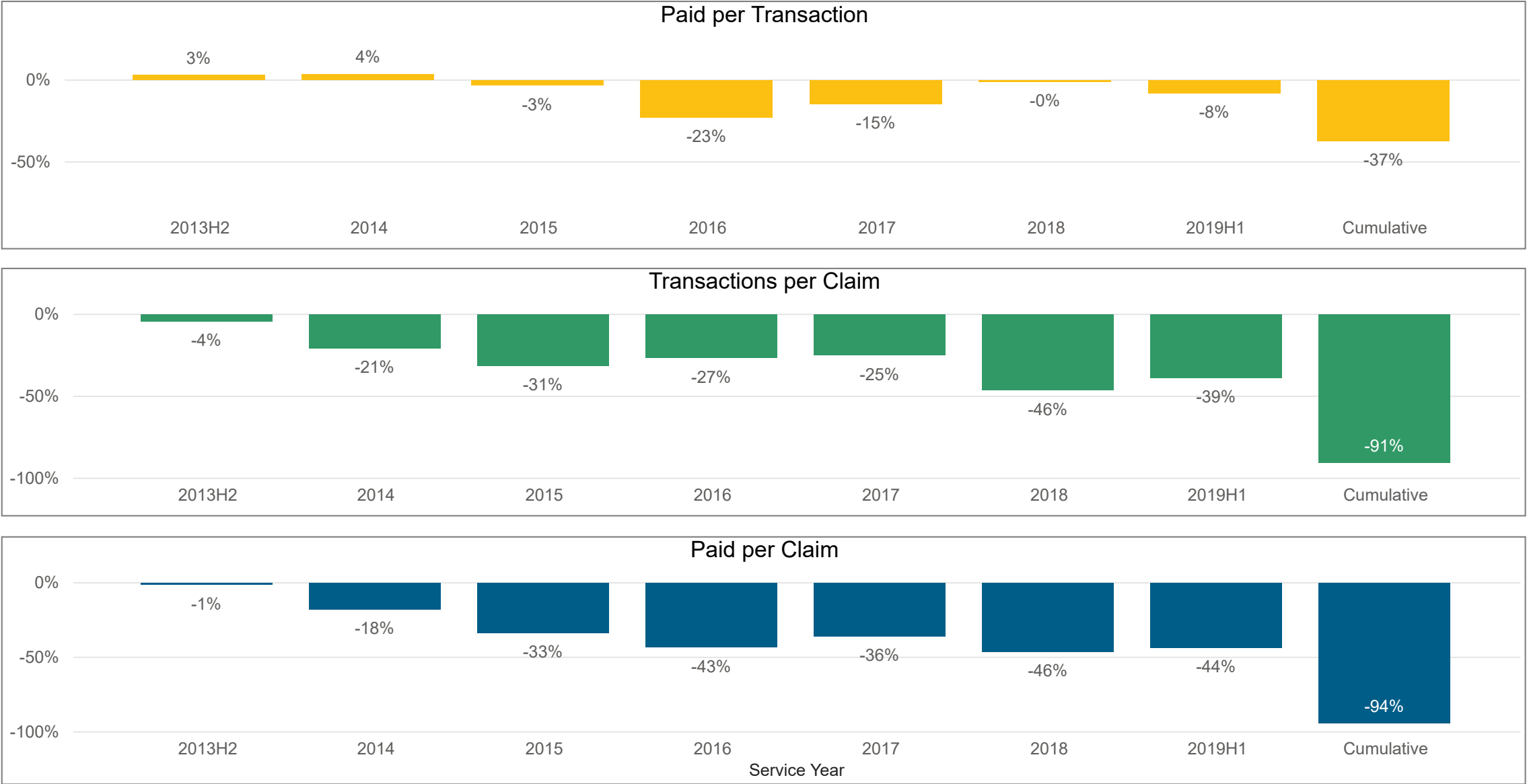
# % Change in *Pharmaceutical* Cost per Claim (4% of All Medical Payments)

As of October 7, 2019



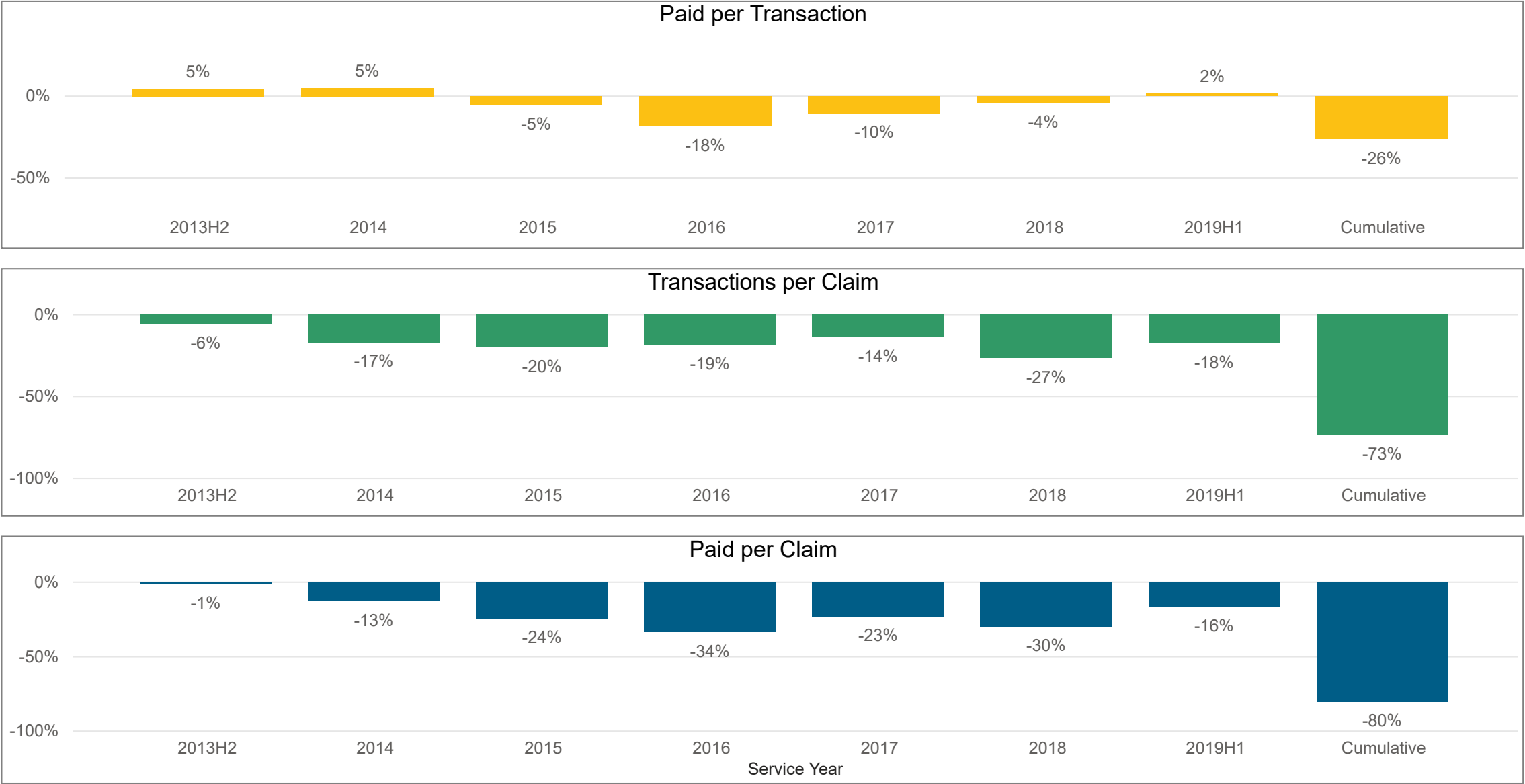
# % Change in *Opioid* Cost per Claim (0.4% of All Medical Payments)

As of October 7, 2019



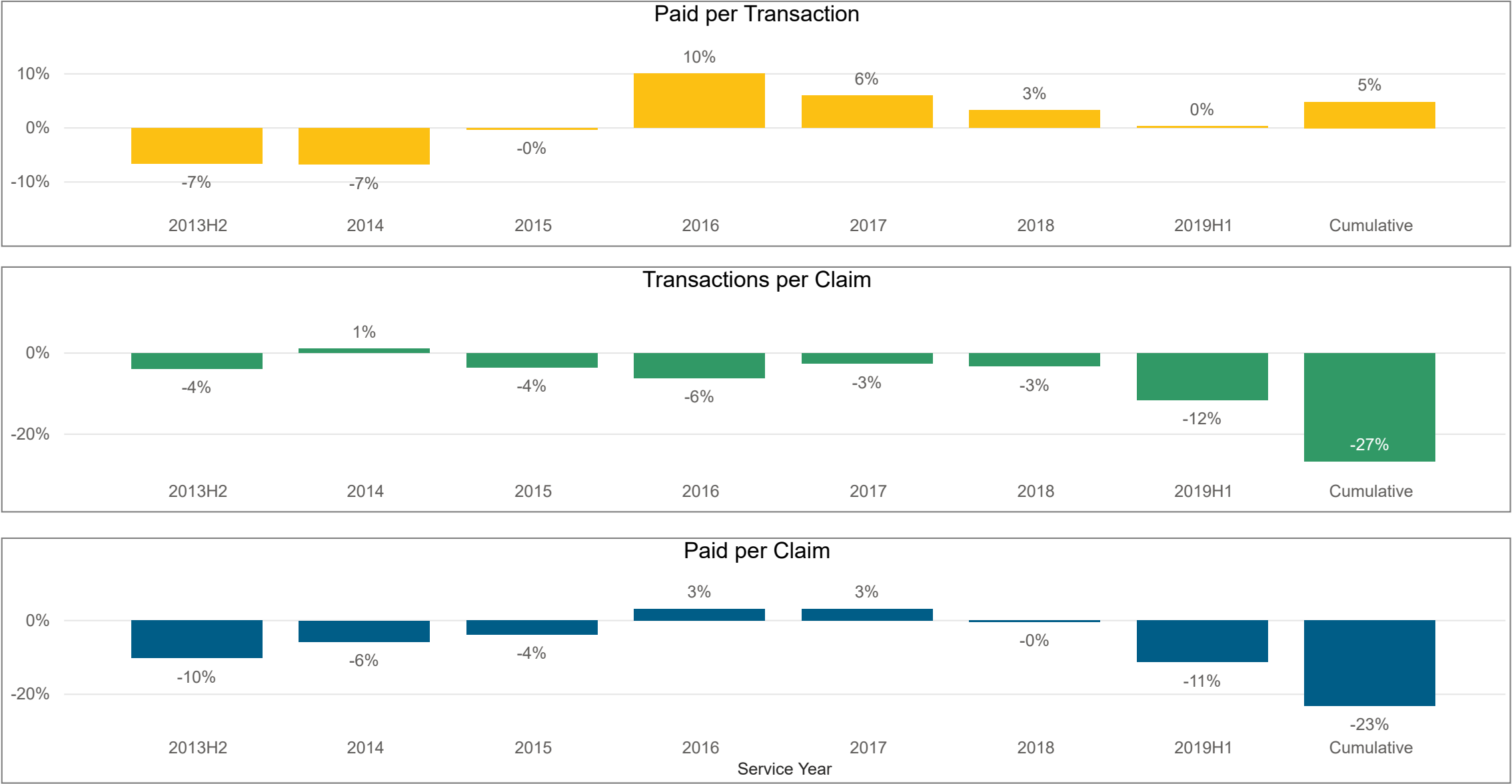
# % Change in *Non-Opioid* Cost per Claim (3.6% of All Medical Payments)

As of October 7, 2019



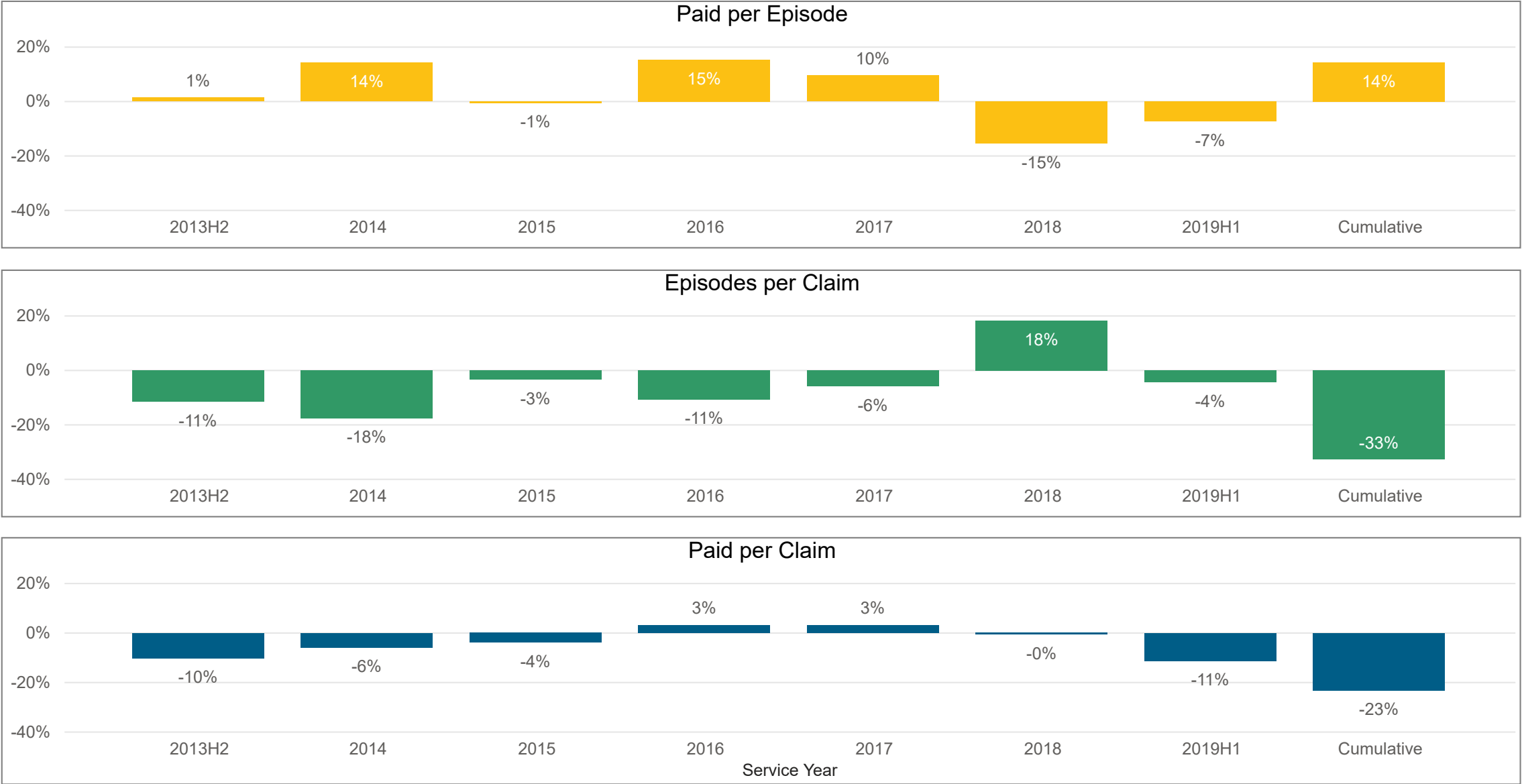
# % Change in *Inpatient* Cost per Claim (transaction-based) (11% of All Medical Payments)

As of October 7, 2019



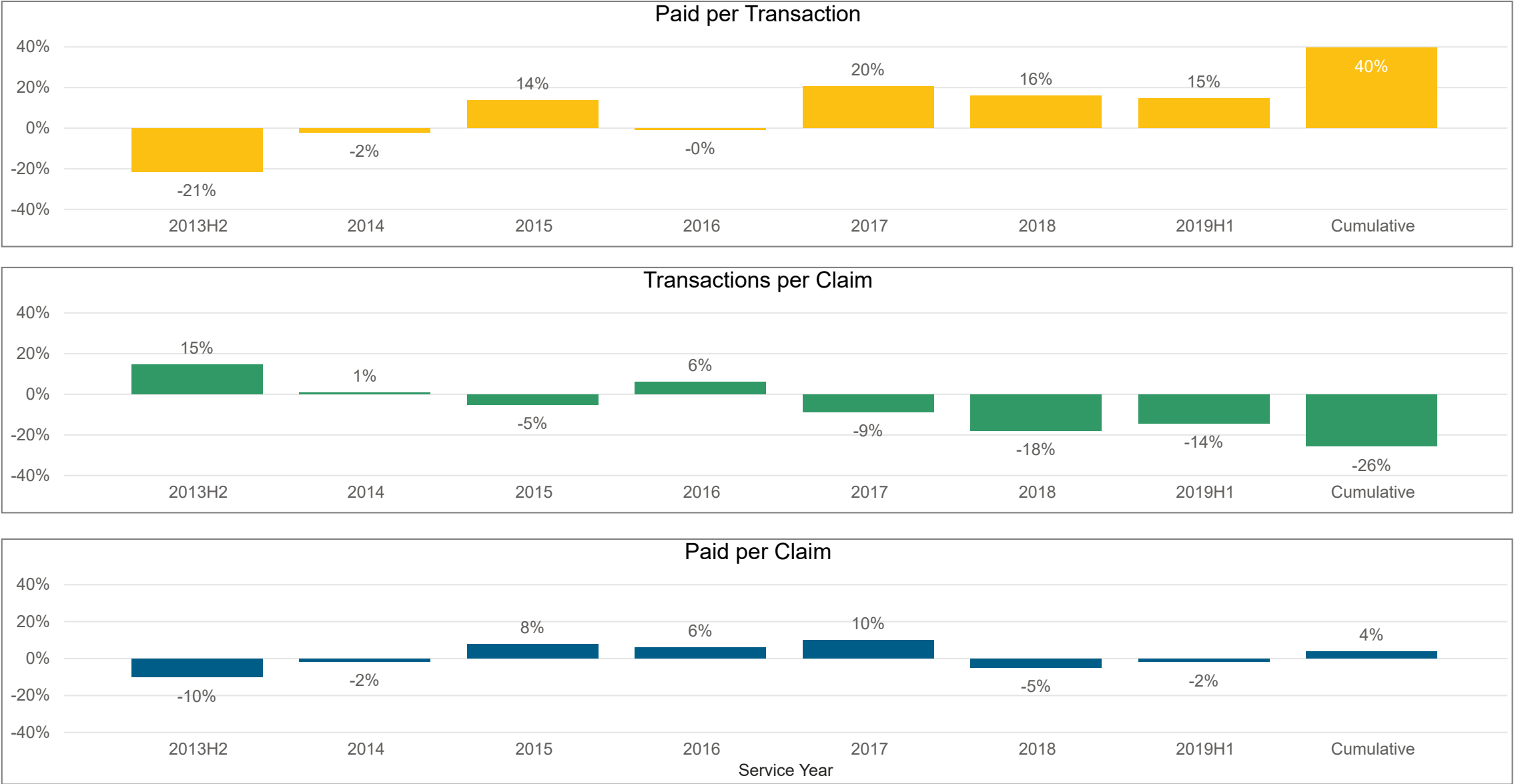
# % Change in *Inpatient* Cost per Claim (episode-based) (11% of All Medical Payments)

As of October 7, 2019



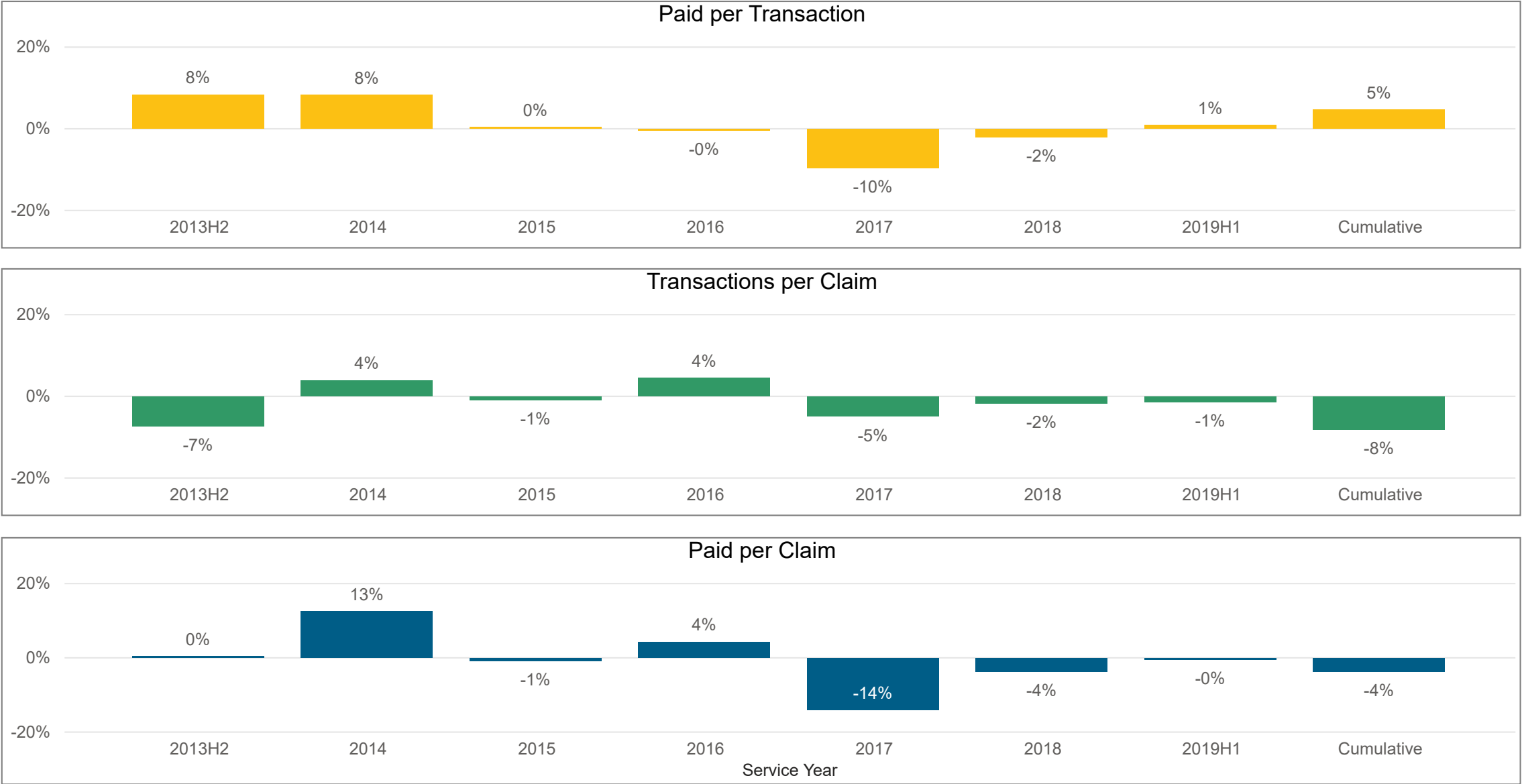
# % Change in *Outpatient* Cost per Claim (9% of All Medical Payments)

As of October 7, 2019



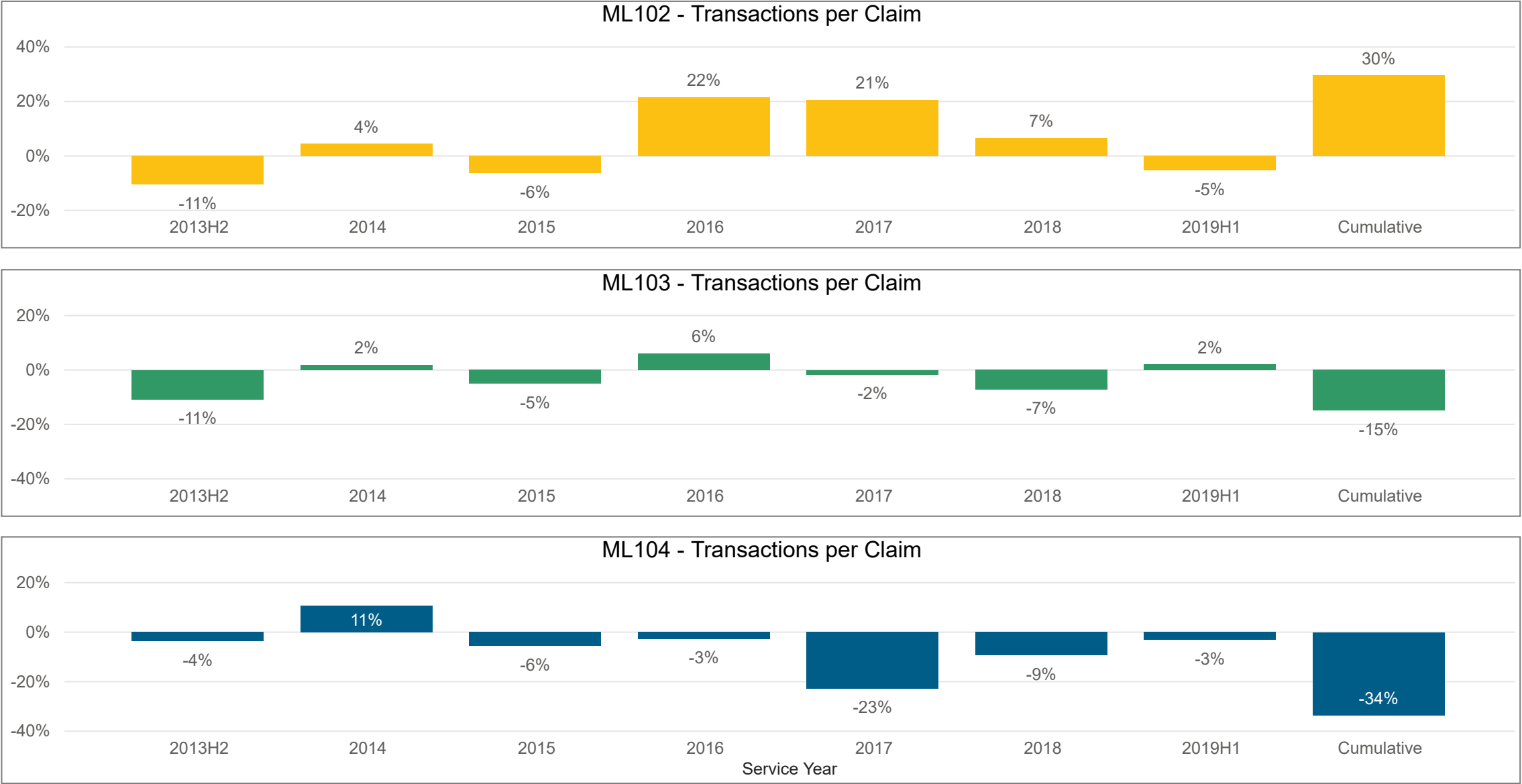
# % Change in *Medical-Legal* Cost per Claim (12% of All Medical Payments)

As of October 7, 2019



# % Change in ML102, ML103, ML104 Transactions per Claim

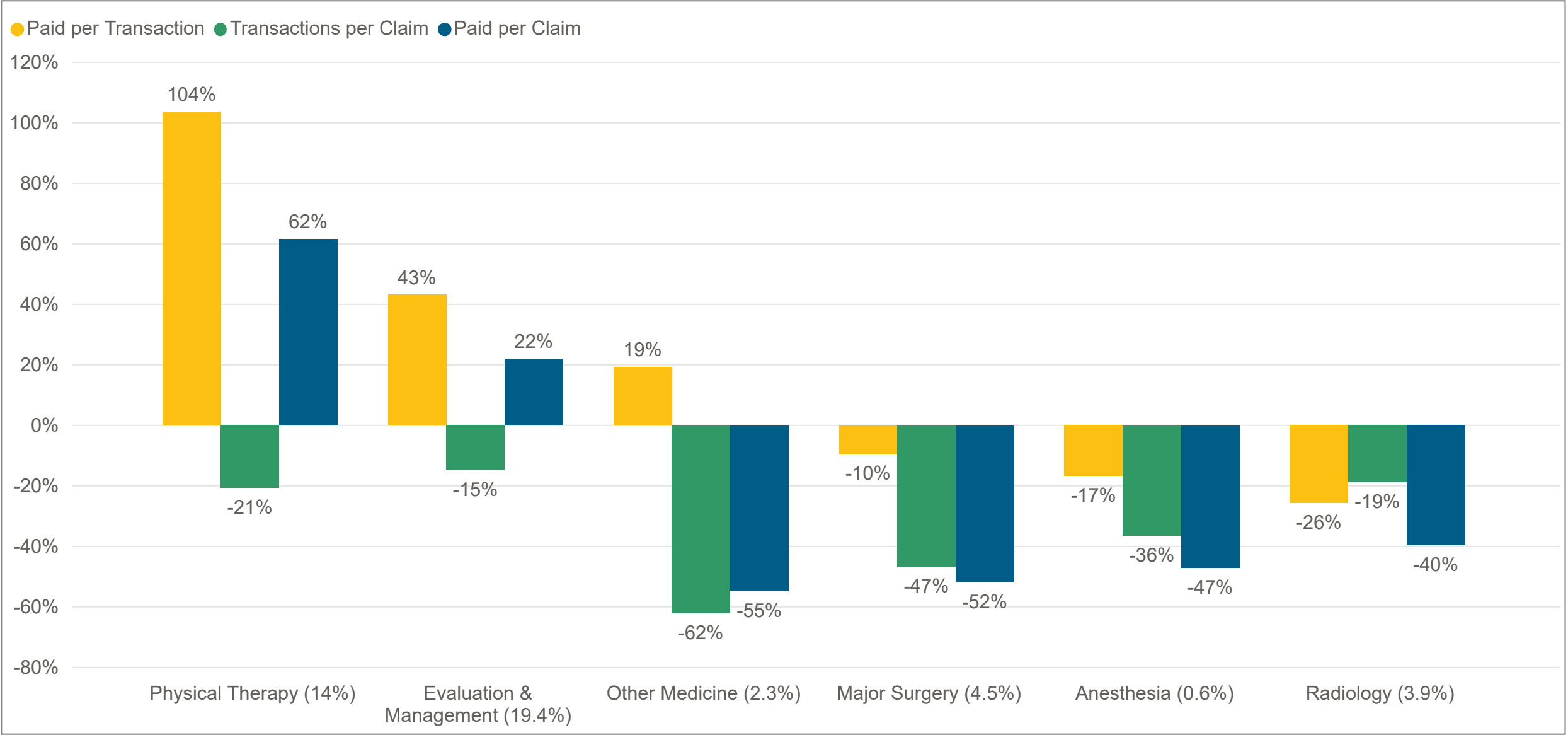
As of October 7, 2019



# Cumulative % Change in Selected Components of Physician Services

## 2012H2 through 2019H1

As of October 7, 2019

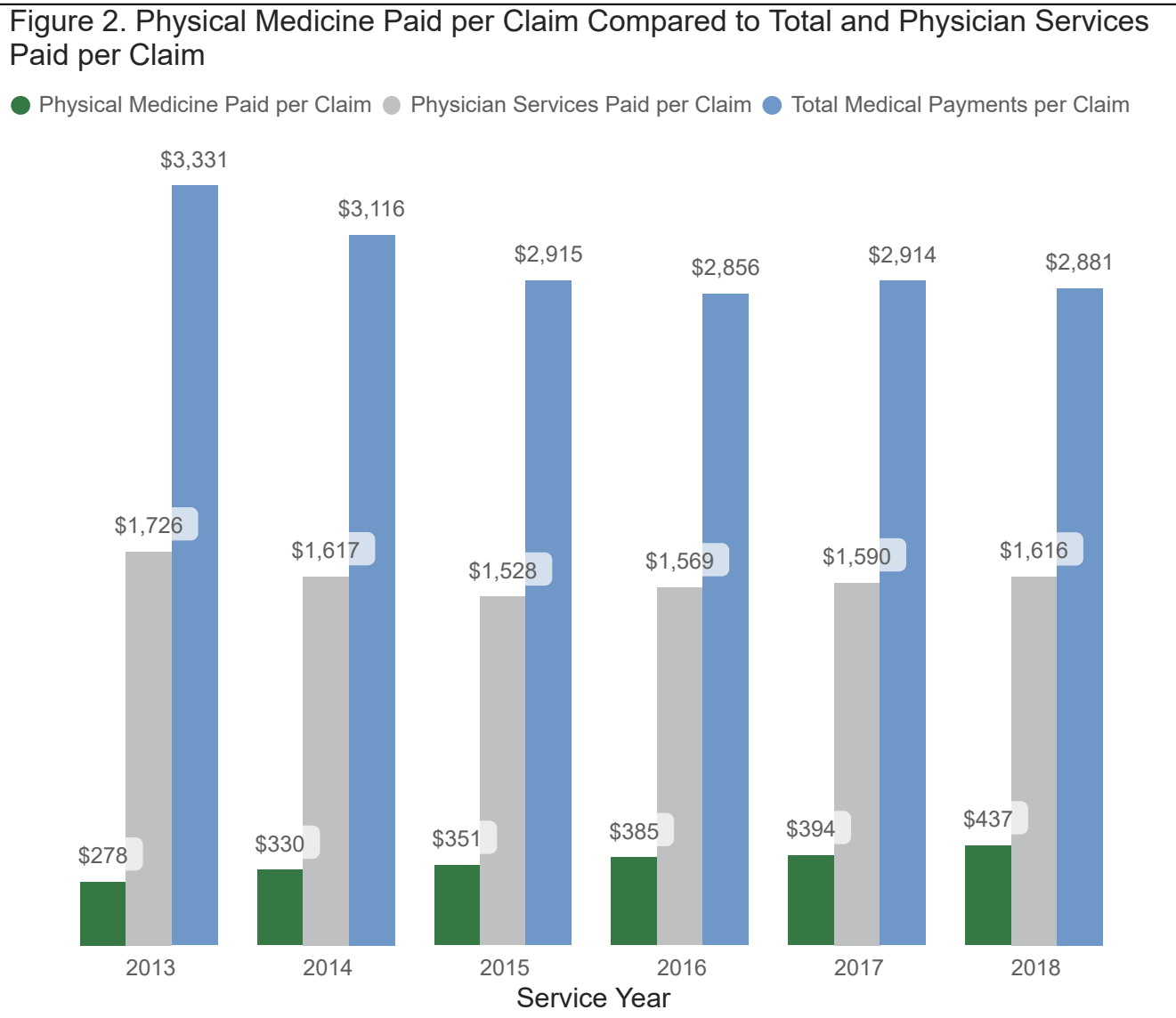
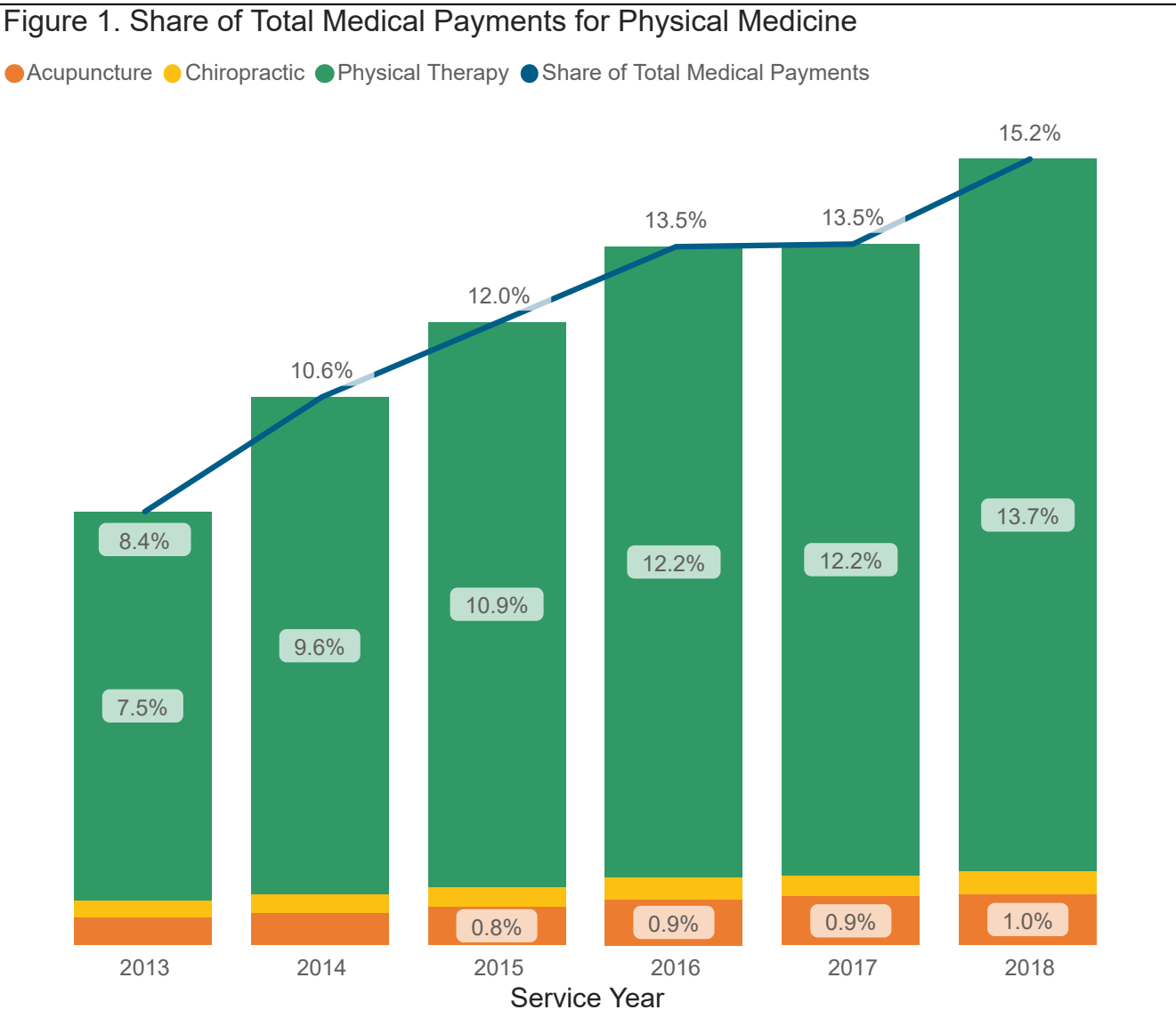


# WCIRB's Upcoming Physical Medicine Study

## Research Questions:

- What are the trends and patterns of physical medicine treatments in the California workers' compensation?
  - Utilization
  - Medical payments
- What are the characteristics of claims involving physical medicine treatment?
  - Industry sector
  - Injury mix
  - Access to care
- What is the association between early physical medicine treatment and opioid use?
  - Any opioid use
  - Doses of opioids prescribed
- Were claims involving early use of physical medicine treatments less likely to have any lost time 12 months after the injury?

# Preliminary Findings - Trends and Patterns of Physical Medicine Treatment



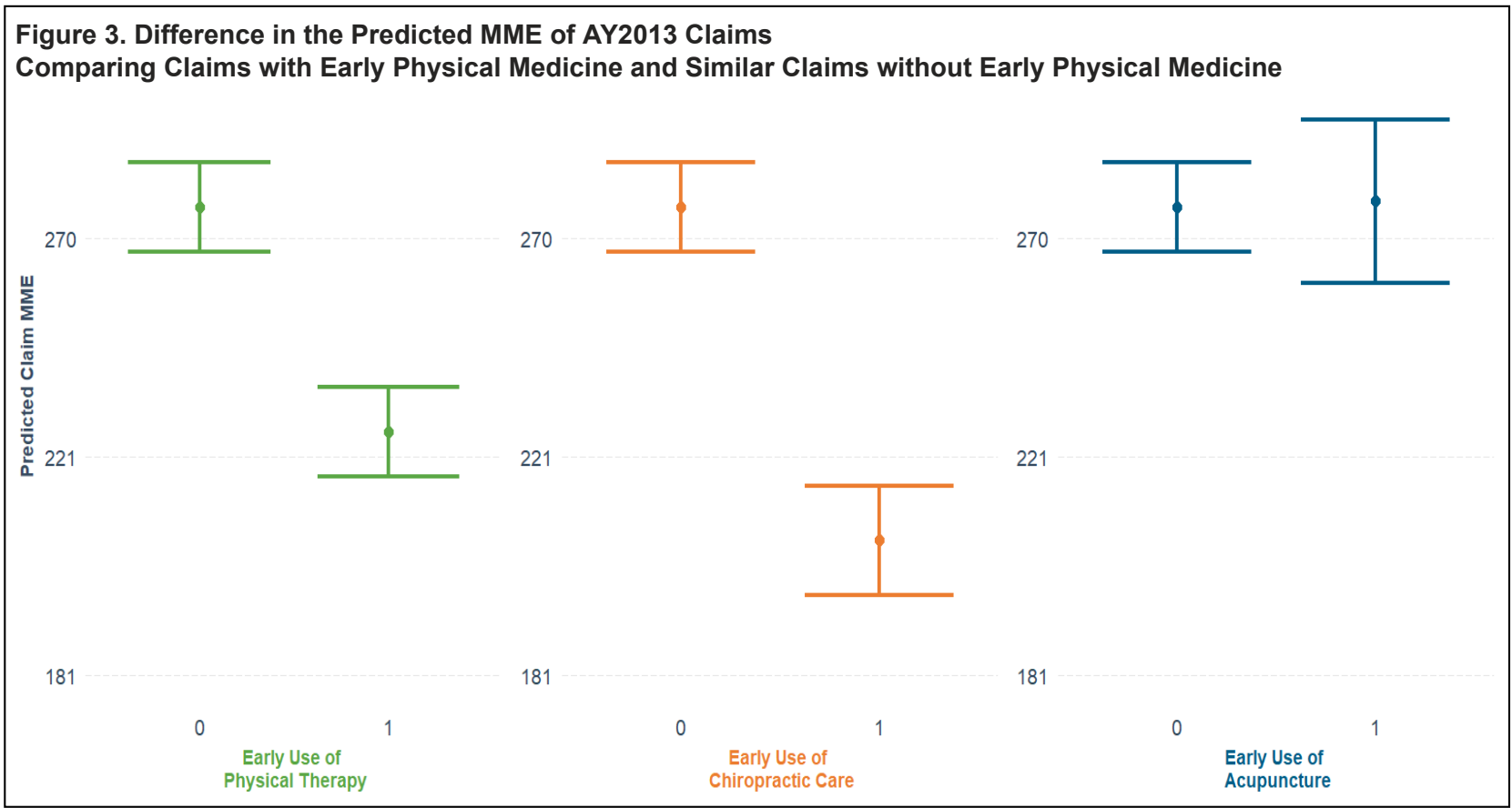
# Preliminary Findings - Early Use of Physical Medicine and Opioid Use

## Any Opioid Use:

- Before 2015, early PT did not reduce the risk of opioid use; however, between 2015 and 2017, early PT started to lower the likelihood of any opioid use by about 3%.
- Early chiropractic care significantly reduced the probability of opioid use.

## Doses of Opioids Prescribed:

- Early PT reduced the average doses of opioids prescribed by **19%**.



# Preliminary Findings - Early Use of Physical Medicine and Lost Time

- Claims with early PT tended to have a significantly lower risk (**12%**) of having lost time one year after the injury.
- Claims with lost time:
  - Defined as indemnity claims with a valid last date worked
  - Sample size: ~10k claims (linked between medical transaction data and indemnity transaction data)
- Logistic regression controlled for:
  - Demographic and injury mix - Accident year, age, gender, industry, diagnosis group, pain type, surgery
  - Concurrent medical treatments - Non-opioid pain medication, provider specialty, number of providers seen, opioid use
  - Access to care - service lag, region

**Table 1. Adjusted Association between Physical Medicine and Lost Time (N=10,147)**

Type of Physical Medicine	Adjusted Odds Ratio of Having Lost Time	95% Confidence Interval
Has Early PT	0.88 *	0.78, 0.99
Has Early Chiropractic	1.01	0.76, 1.36
Has Early Acupuncture	0.97	0.60, 1.56

Note. ‘\*’ P-value < 0.05

# 03

## Experience of Large Deductible Policies



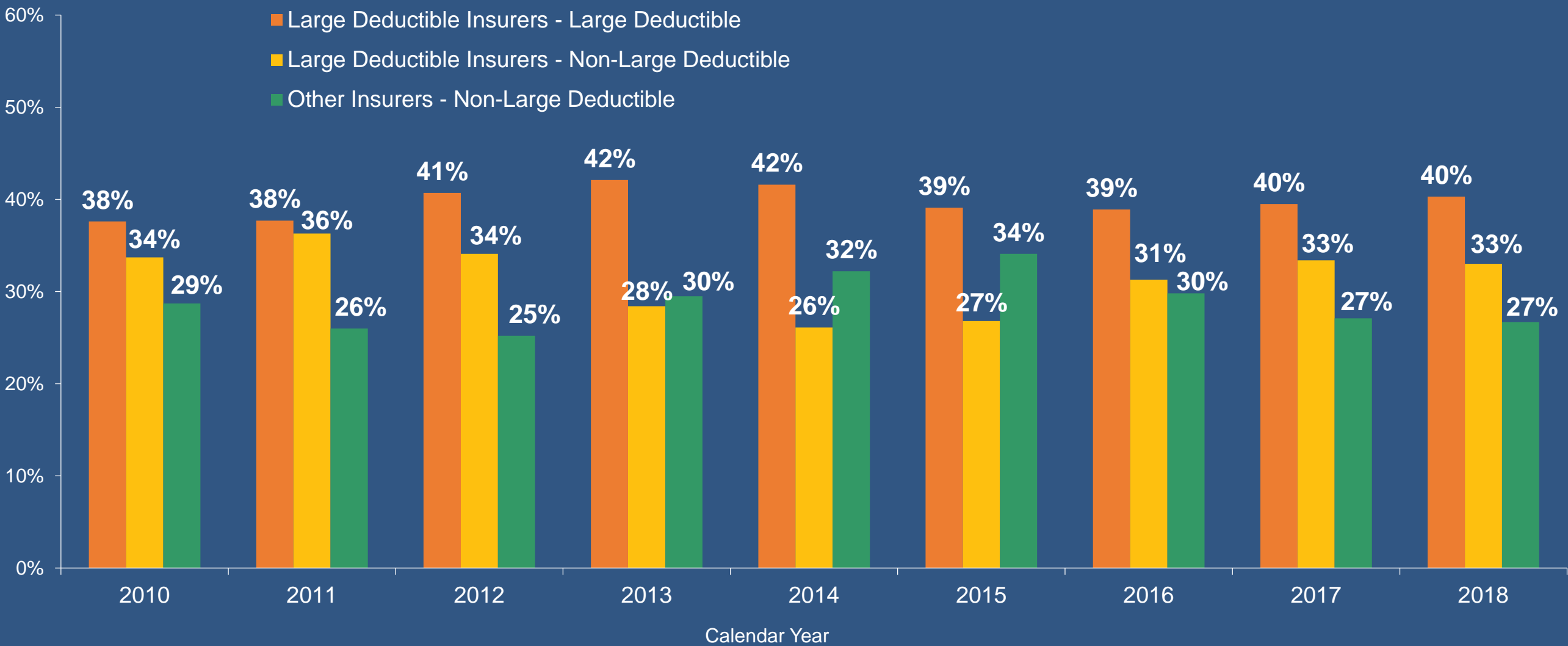
# Experience of Large Deductible Policies

- Annually the Actuarial Committee reviews the experience of large deductible policies (December 31 Experience)
- Findings in prior Actuarial Committee evaluations:
  - Large deductible market proportion relatively stable
  - Paid development patterns are generally similar to non-large deductible policies
  - Impact of excluding large deductible experience from the rate level computation is relatively modest
  - No adjustment to rate level computation needed

# Distribution of Calendar Year Premiums

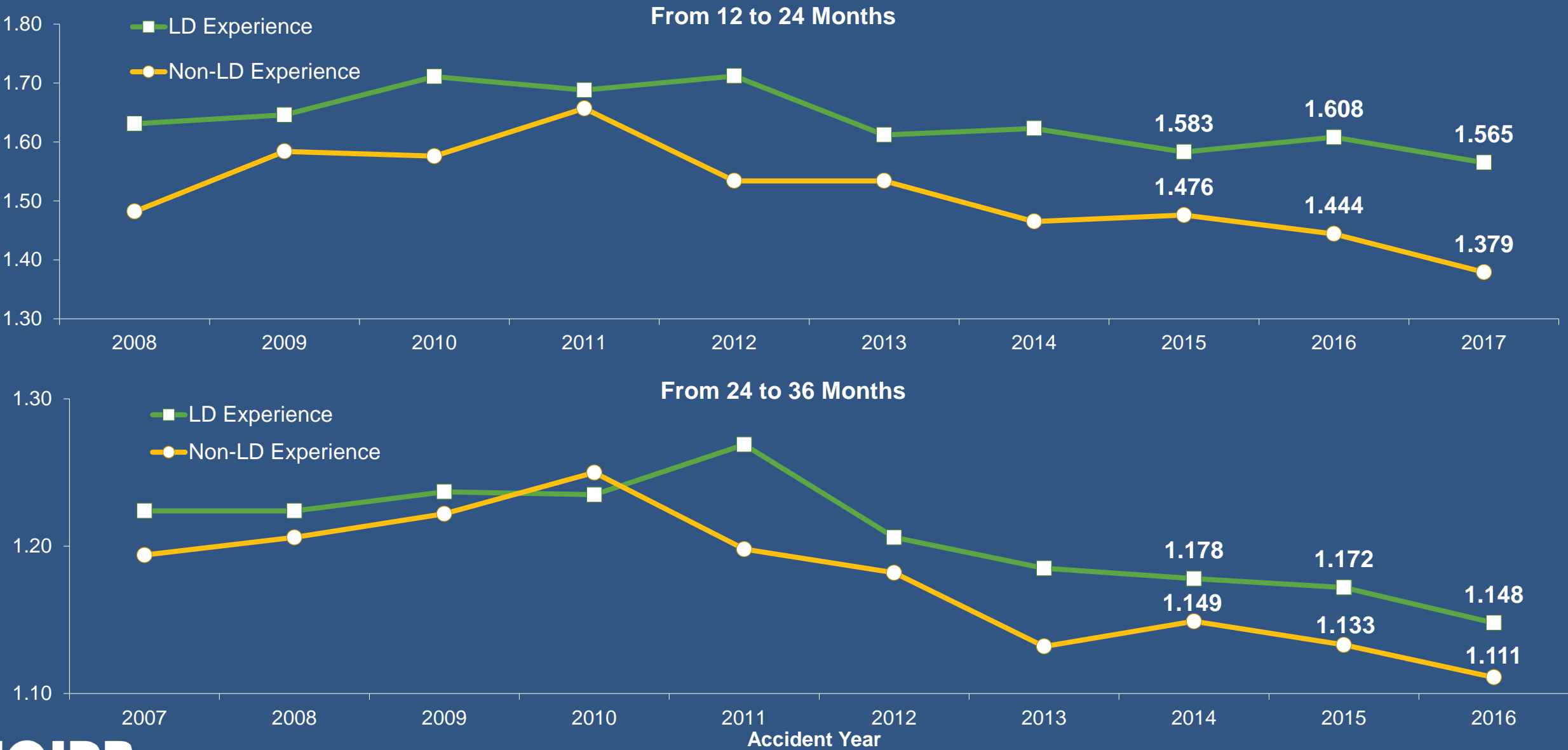
## Written Premium at Pure Premium Rate Level (Exhibit 1.1)

As of December 31, 2018



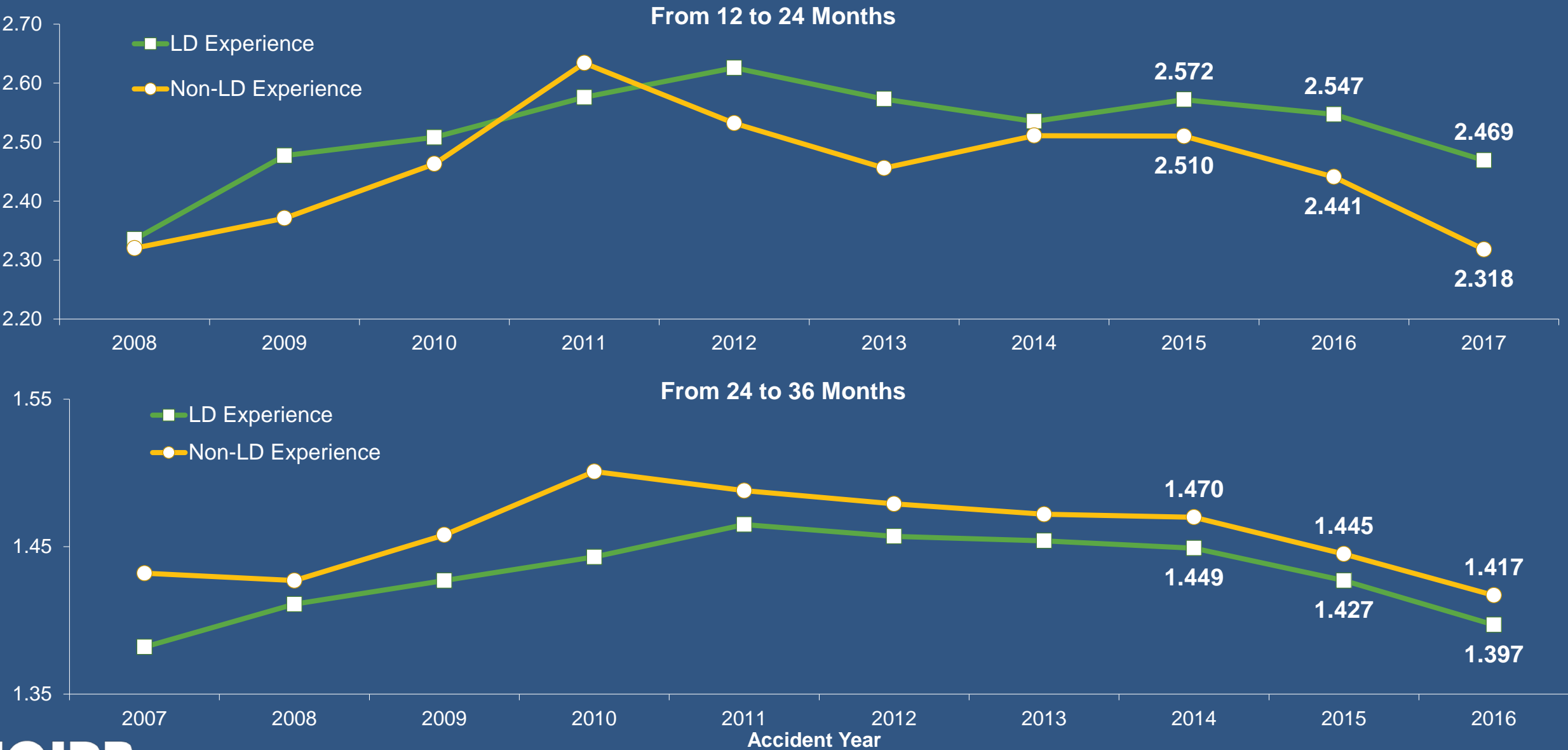
# Incurred Medical Development (Exhibit 3.2)

As of December 31, 2018



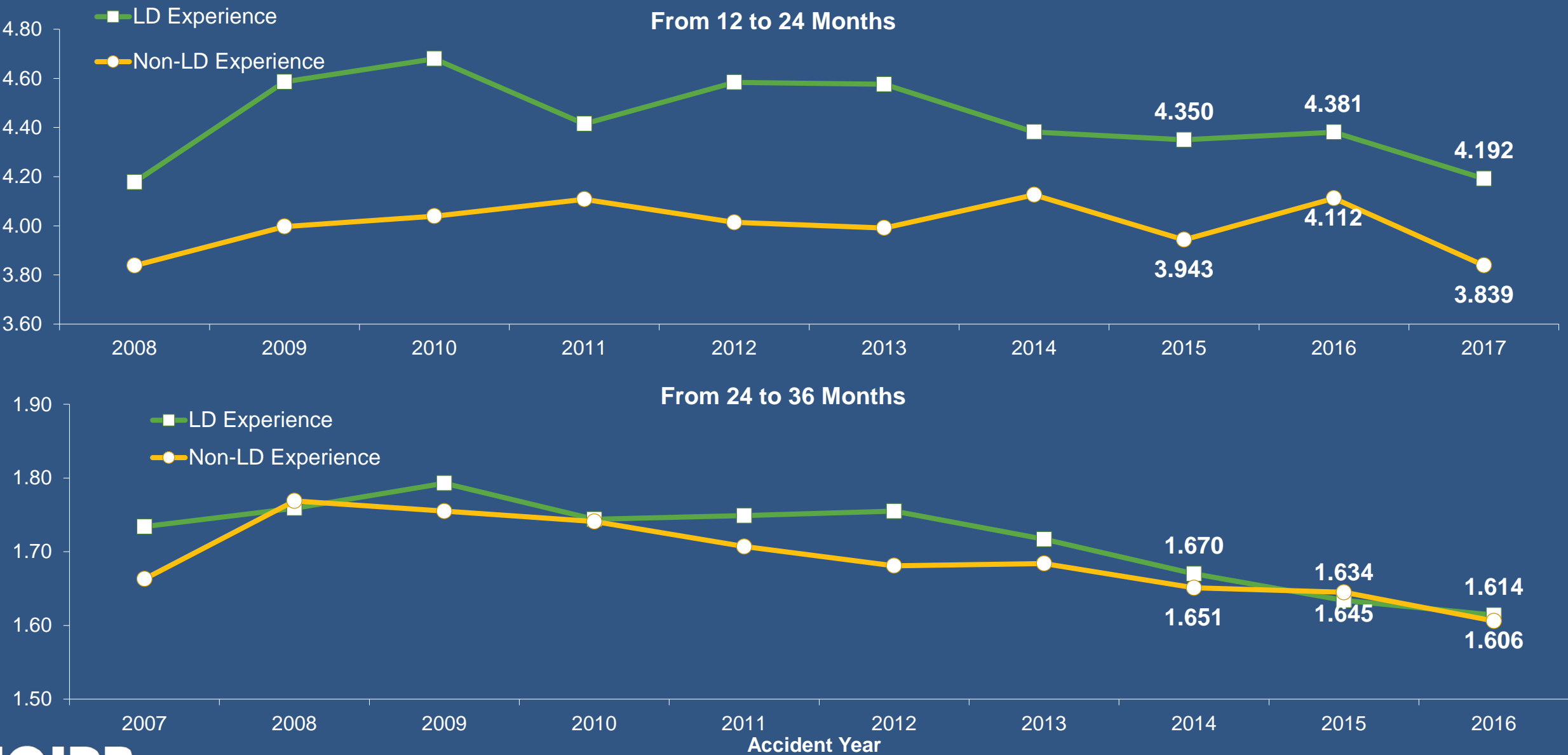
# Paid Medical Development (Exhibit 3.4)

As of December 31, 2018



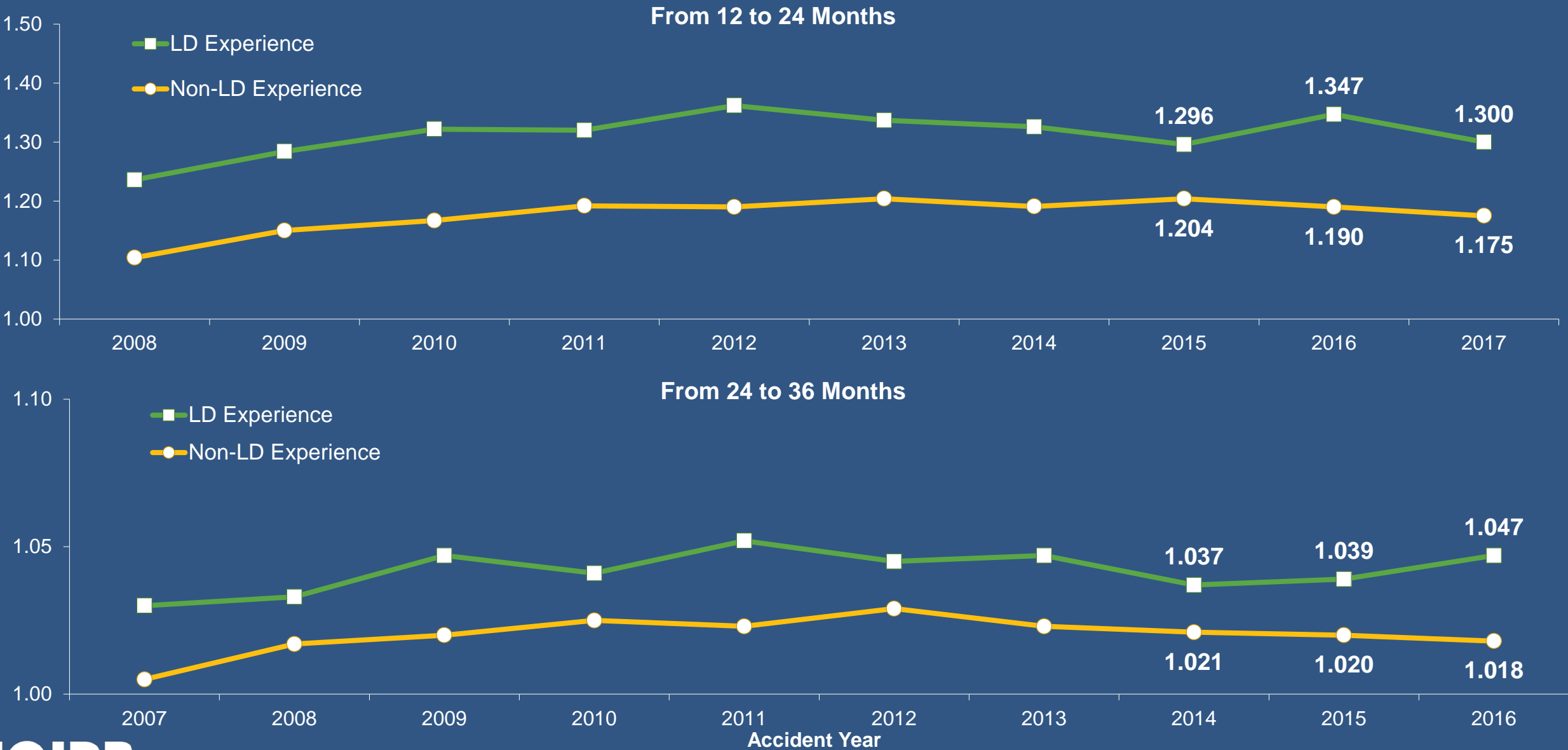
# Paid ALAE Development (Private Insurers) (Exhibit 3.5)

As of December 31, 2018



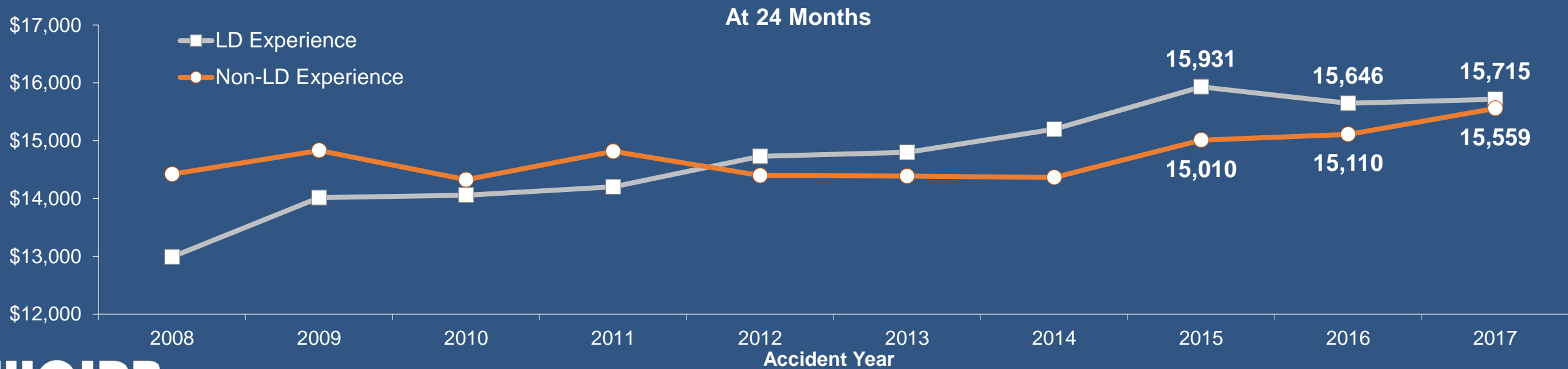
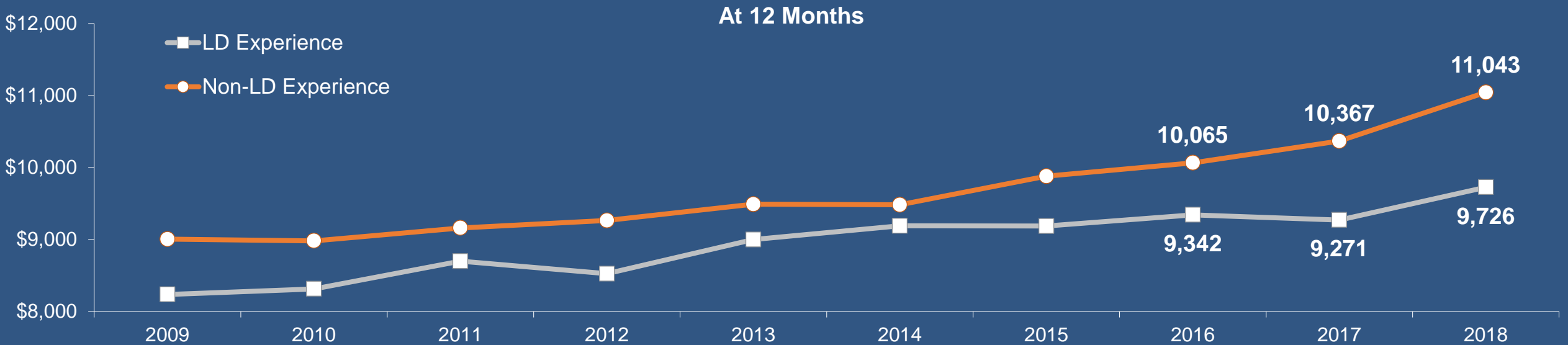
# Reported Indemnity Claim Count Development (Exhibit 6.1)

As of December 31, 2018



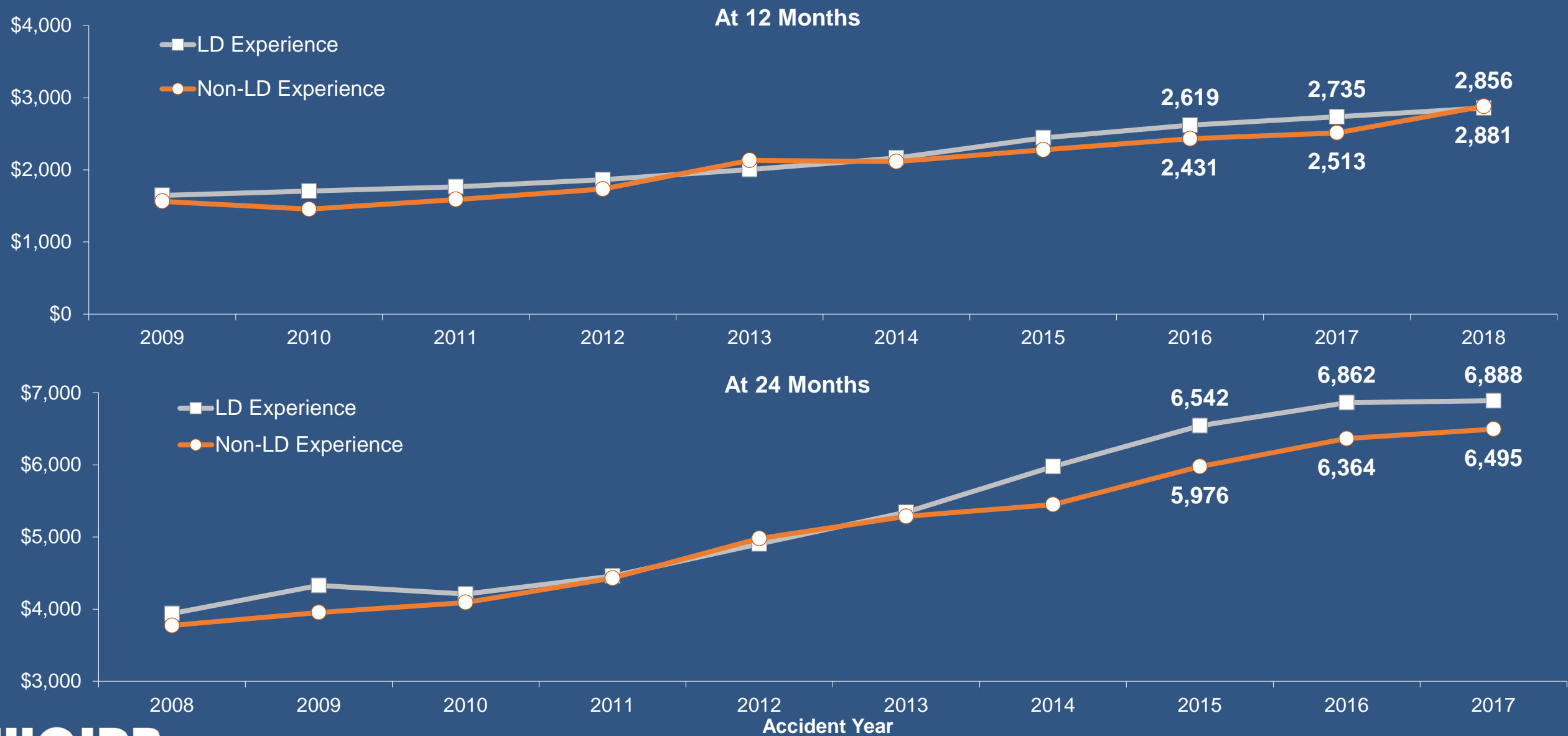
# Average Incurred Indemnity per Indemnity Claim (Exhibit 4.1)

As of December 31, 2018



# Average Paid Indemnity per Closed Claim (Exhibit 4.3)

As of December 31, 2018



# 04

## Update on Medical Severity Trends by Component



# 05

## Review of Medical On-level Adjustments



# Current Medical On-level Approach

- Adjust medical losses for changes resulting from legislation and regulation
- Compiled on an accident year basis
- Key assumptions
  - Proportion of services for an accident year are constant and based on the most recent calendar year
  - Medical inflation is also constant for an accident year and based on the most recent calendar year
  - Payment pattern for each type of service is uniform
- Issues with current approach
  - Most medical reforms apply on a service year rather than accident year basis
  - Distribution of payments by type of service differs significantly by maturity
  - Current approach does not explicitly reflect annual inflation updates to fee schedules

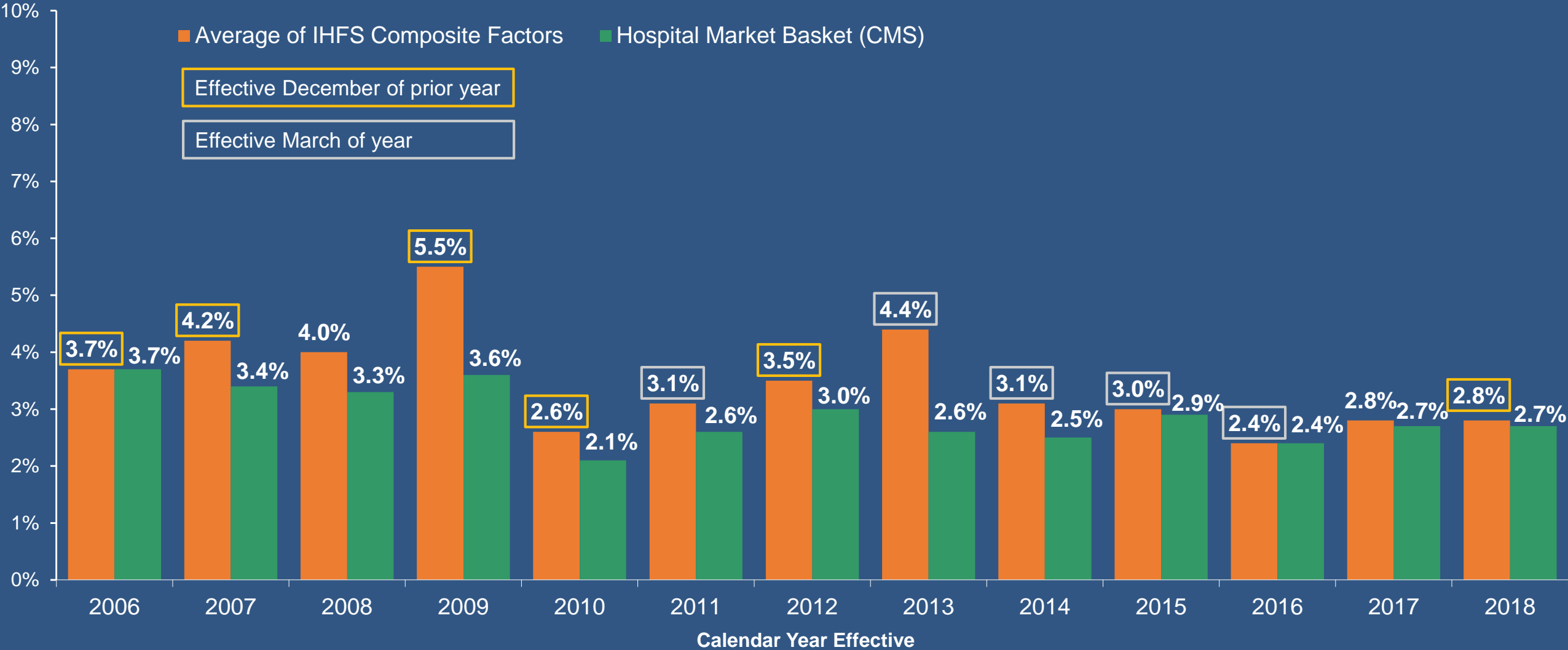
# Refined Medical On-level Approach Reviewed at 12/5/2018 Meeting

- Estimate accident year medical payment pattern to reflect changes that go into effect by service year
- Distribute medical payments by type of service and maturity using WCIRB medical transaction data
- Estimate calendar year inflationary changes by type of service (fee schedule)
- At 12/5/2018 meeting, Committee showed interest in reviewing approach further
- Implementation of full approach requires understanding of each fee schedule
  - Which factors determine the maximum reimbursement rates
  - How and when updates are adopted by the DWC
- Full approach requires projection of future medical inflationary changes to schedules to not understate residual trend
- Staff reviewed implementation of approach for the Inpatient Hospital Fee Schedule (IHFS) changes

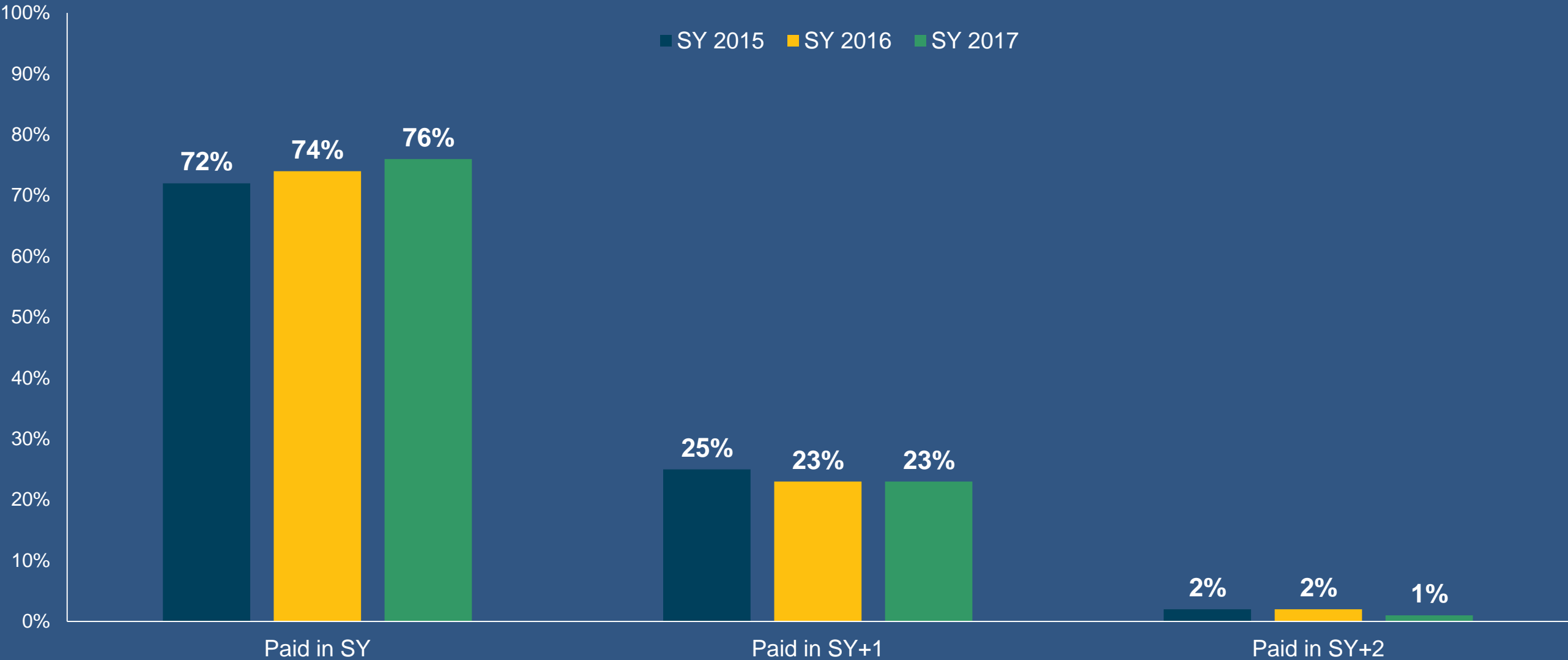
# Inpatient Hospital Fee Schedule (IHFS)

- IHFS in effect for California starting April 1999
- Maximum reimbursement rates generally based on:
  - Composite factor for each facility (set by DWC)
  - 120% of Medicare relative weight for each diagnosis related group (DRG)
- IHFS fees are approximately 10% of medical service payments
- Medicare updates are adopted by DWC approximately annually but the effective dates vary

# Change in IHFS Composite Factors (Exhibit 3)



# IHFS Payment Lag (Exhibit 4)



# Mechanics of Refined Medical On-level Approach for IHFS

- Example for AY 2016
  - CMS Hospital Market Basket is historical through 2019 (48 months)
  - Projections available through 2028 (156 months)
- Step 1 – Compile IHFS inflation factor for each payment year for AY 2016 (Exhibit 5)
  - Based on CMS Hospital Market Basket for CYs 2016 to 2028
  - Adjusted for payment lag on each service year (74/23/3)
- Step 2 – IHFS on-level factor for 2016 is sum-product of:
  - Product of inflation factors by payment year up to projection period (Exhibit 5)
  - IHFS proportion of total medical paid in that PY for 2016 (from medical transaction data)
  - Estimated medical payment pattern for 2016 (from loss projection)
- Example product for 2016 at 12 months (projected to 156 months):
  - $1.422 \times 10.9\% \times 13.1\% = 0.020$
  - AY 2016 total on-level factor is sum over all periods (12 months, 24, months, etc.)

# Summary

- Compiling adjustments for each fee schedule is challenging given unique complexities of each schedule
- Unclear how non-fee schedule impacts (utilization type effects) and other adjustments should be incorporated
- Research into projecting future medical inflation for this approach still in initial phases
- Normal inflationary impacts generally reflected in residual on-level severity trend
- Staff plans to review DWC fee schedule updates as they occur for any major or unusual changes

# 06

9/30/2019  
Experience –  
Review of  
Methodologies

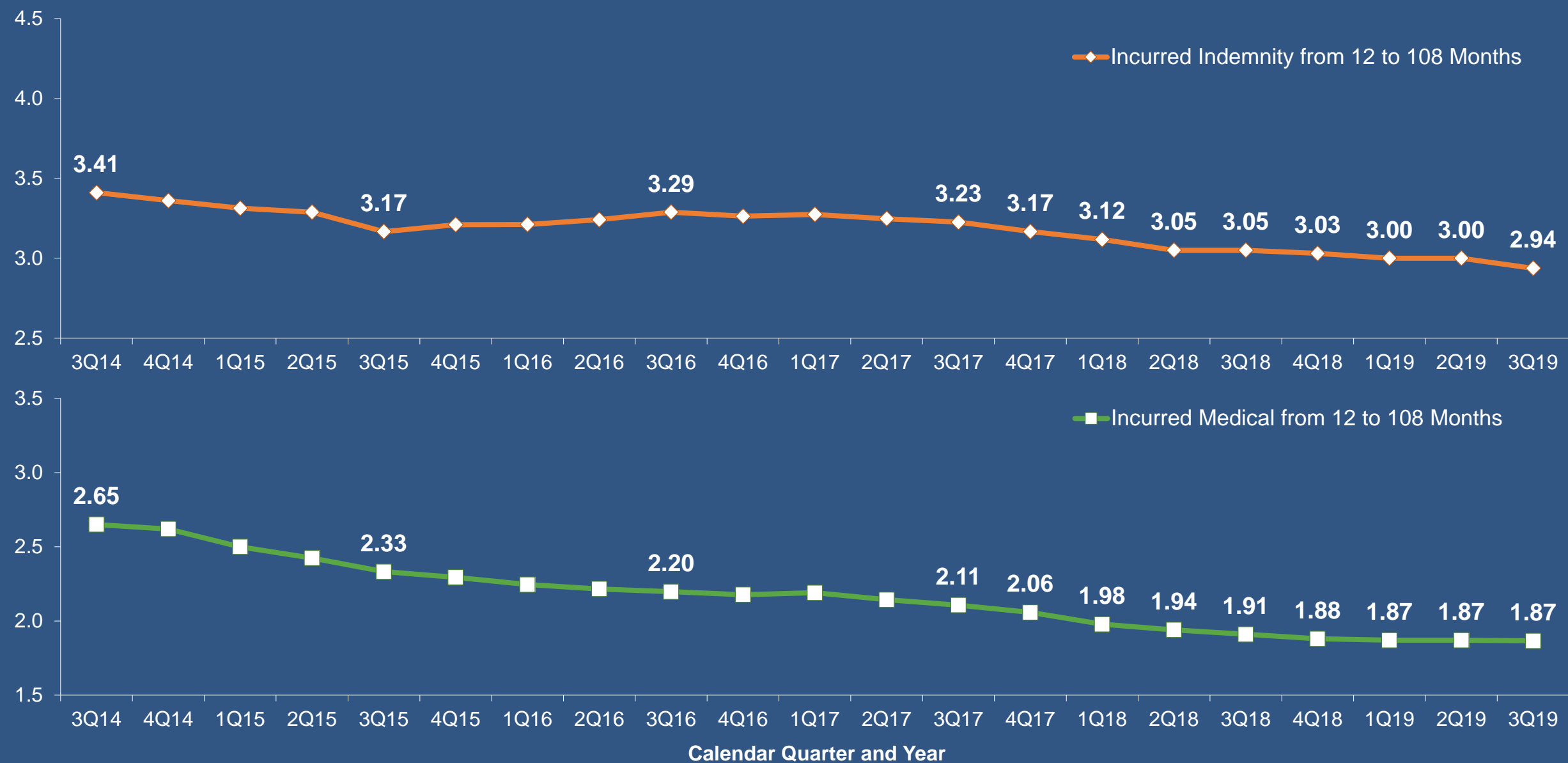


# Summary of 9/30/2019 Experience

- Approximately 100% of market reflected
- Methodologies consistent with 1/1/2020 Filing
- Projected loss ratio for 2020 policies: 0.567
- 1.6 point decrease from 1/1/2020 Filing projection based on 3/31/2019 experience (0.583)
- 0.7 point decrease from projection based on 6/30/2019 experience (0.574)
- Decreases primarily based on lower loss development
  - Very modest declines from updated frequency and wage forecasts

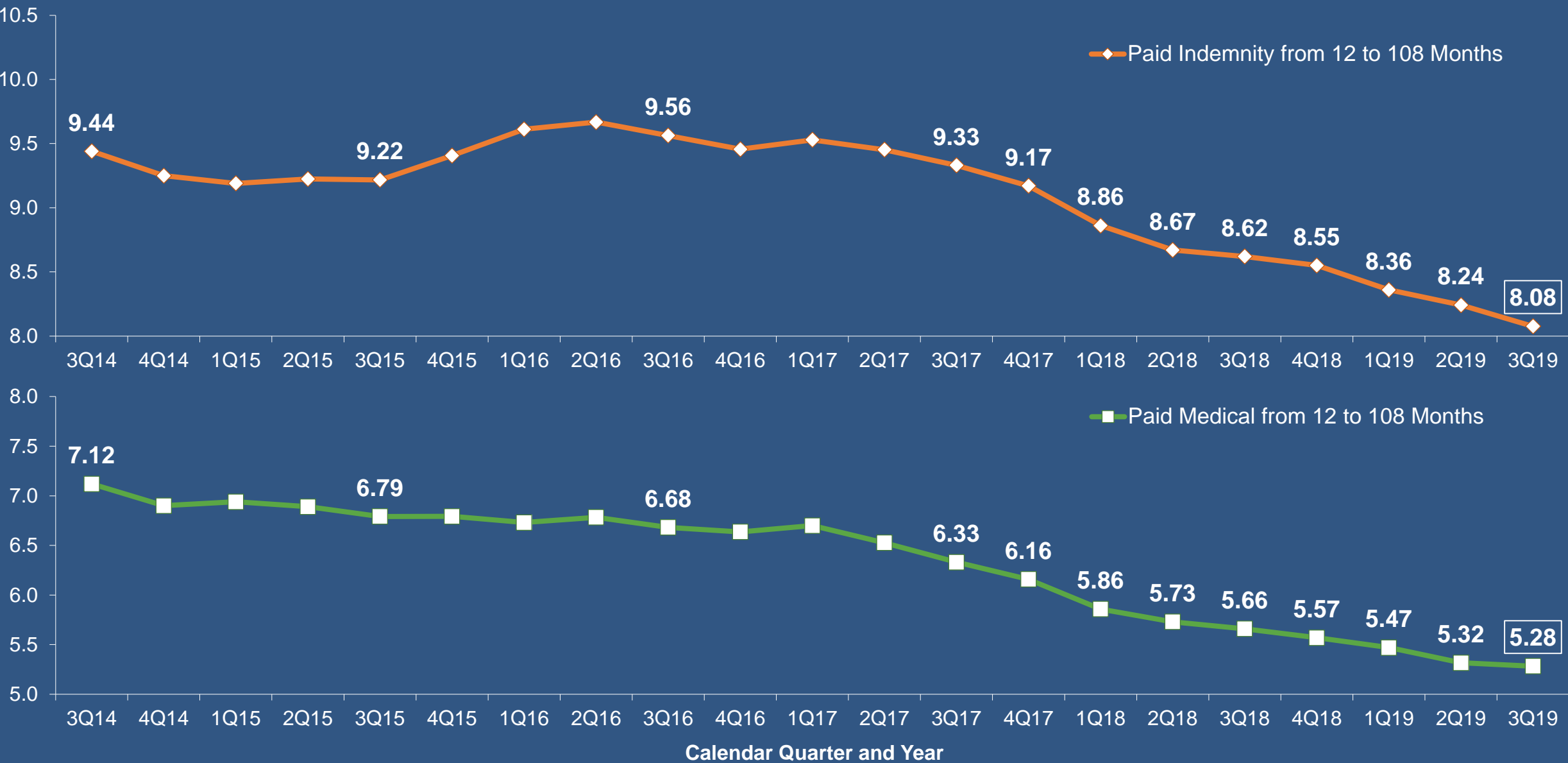
# Cumulative Incurred Development from 12 to 108 Months

As of September 30, 2019



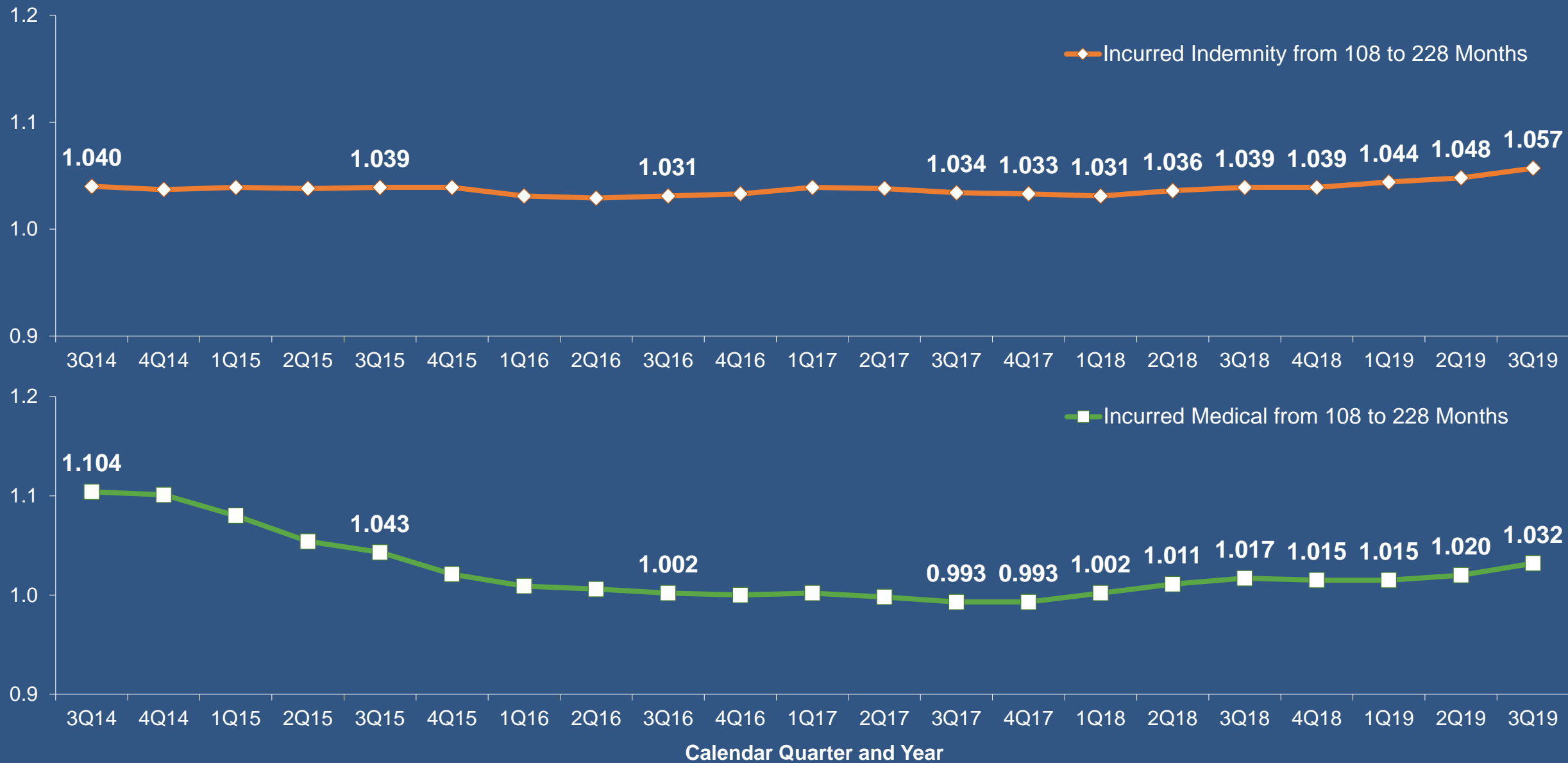
# Cumulative Paid Development from 12 to 108 Months

As of September 30, 2019



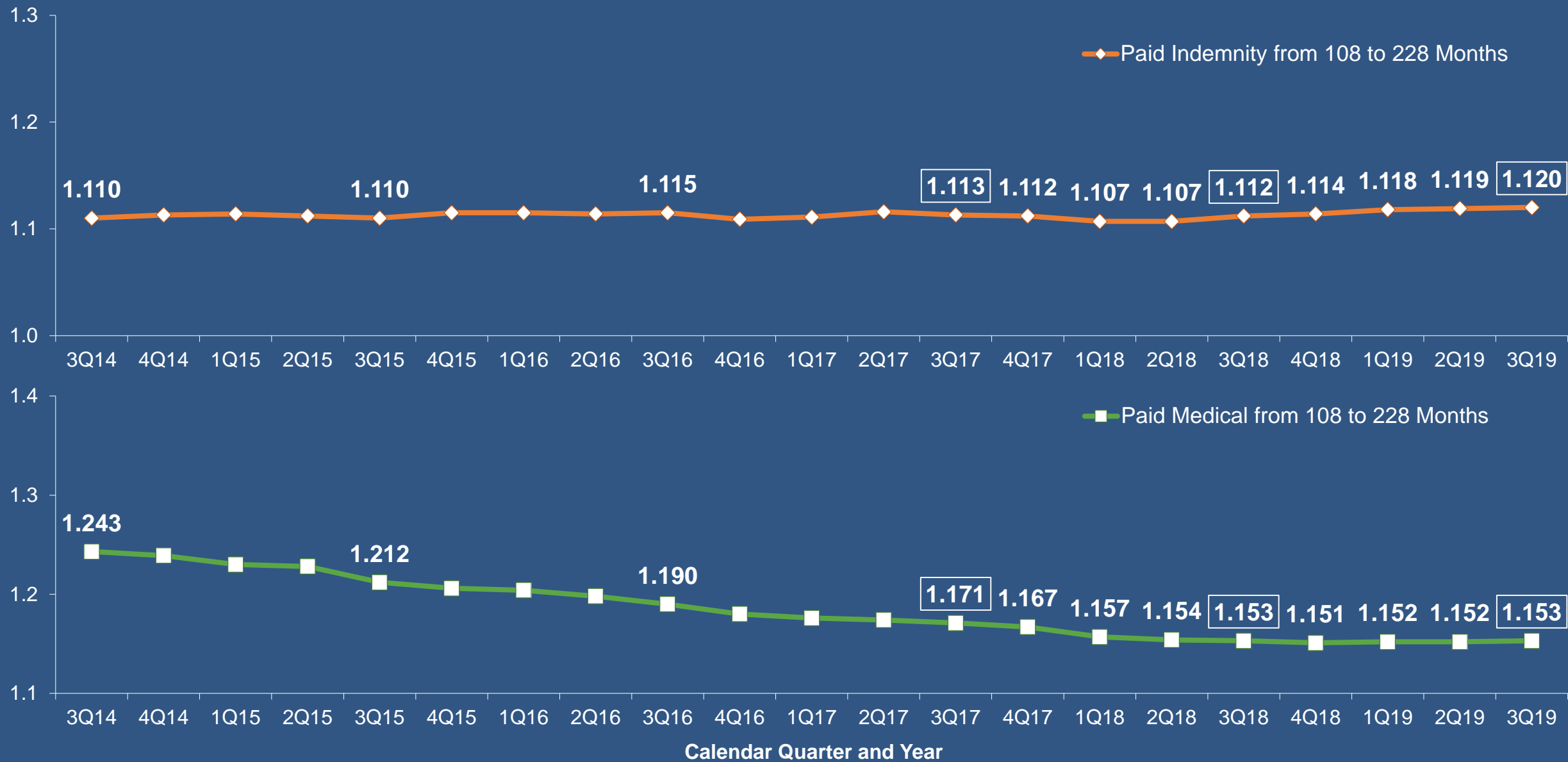
# Cumulative Incurred Development from 108 to 228 Months

As of September 30, 2019



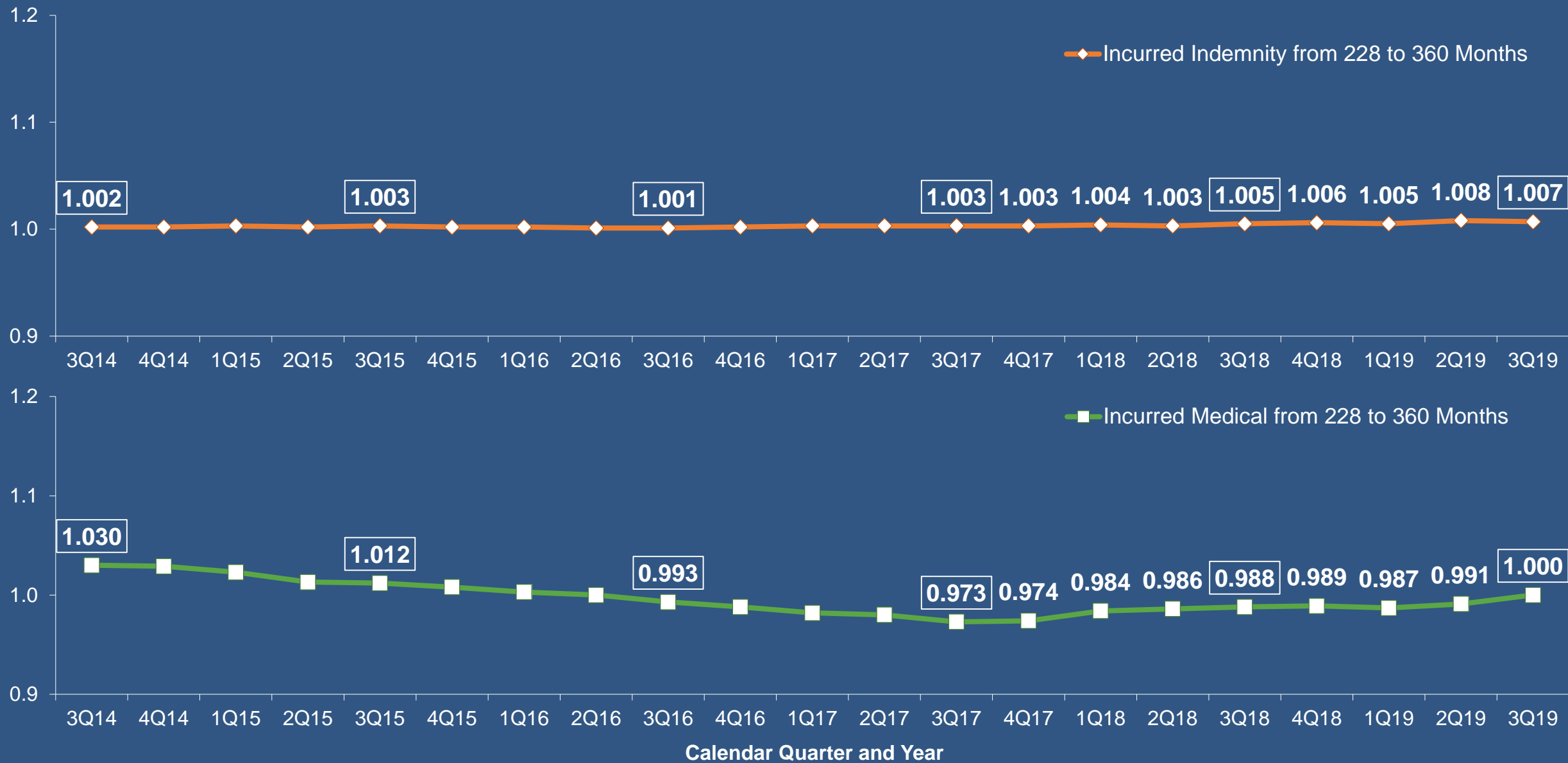
# Cumulative Paid Development from 108 to 228 Months

As of September 30, 2019



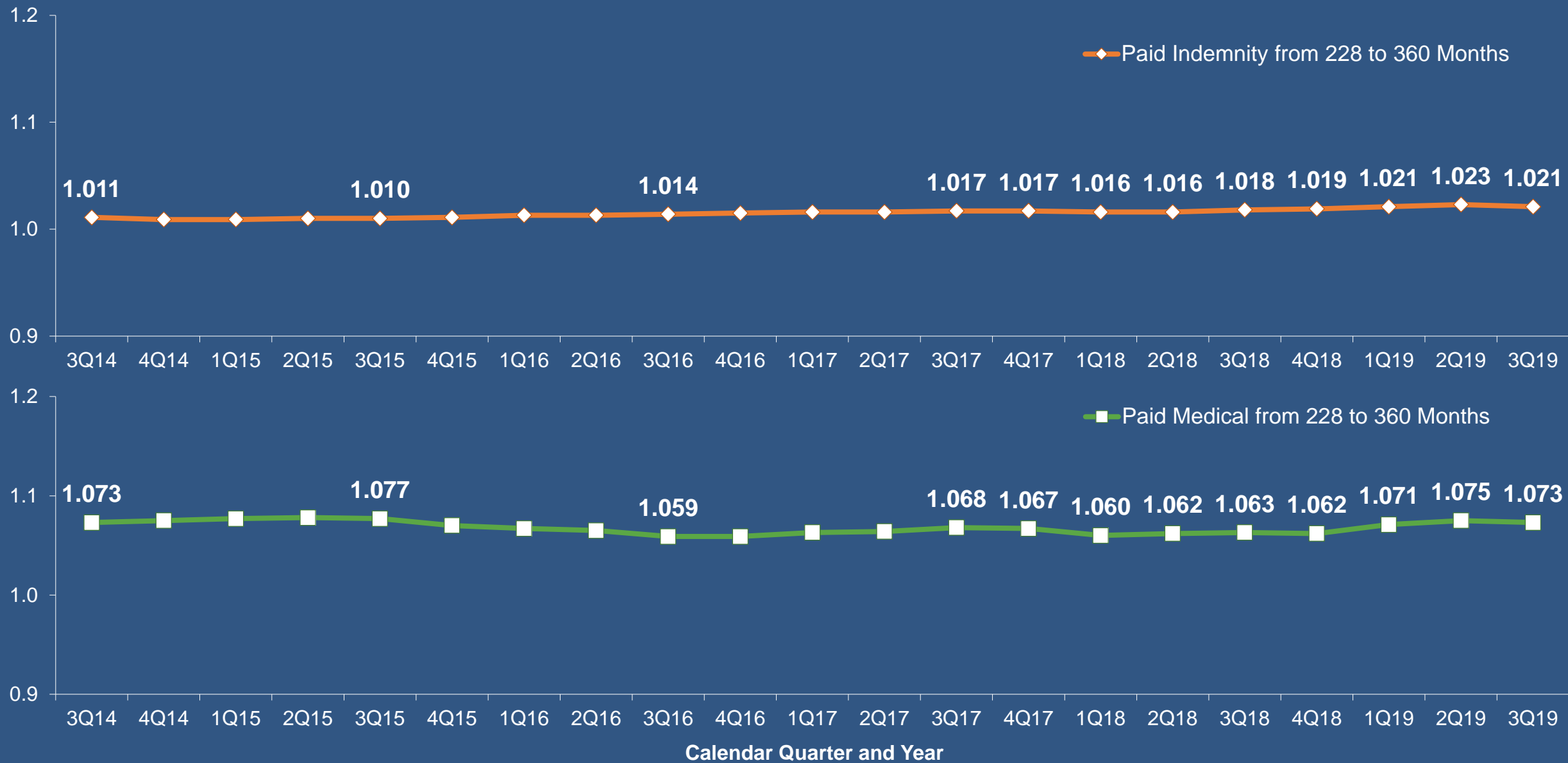
# Cumulative Incurred Development from 228 to 360 Months

As of September 30, 2019



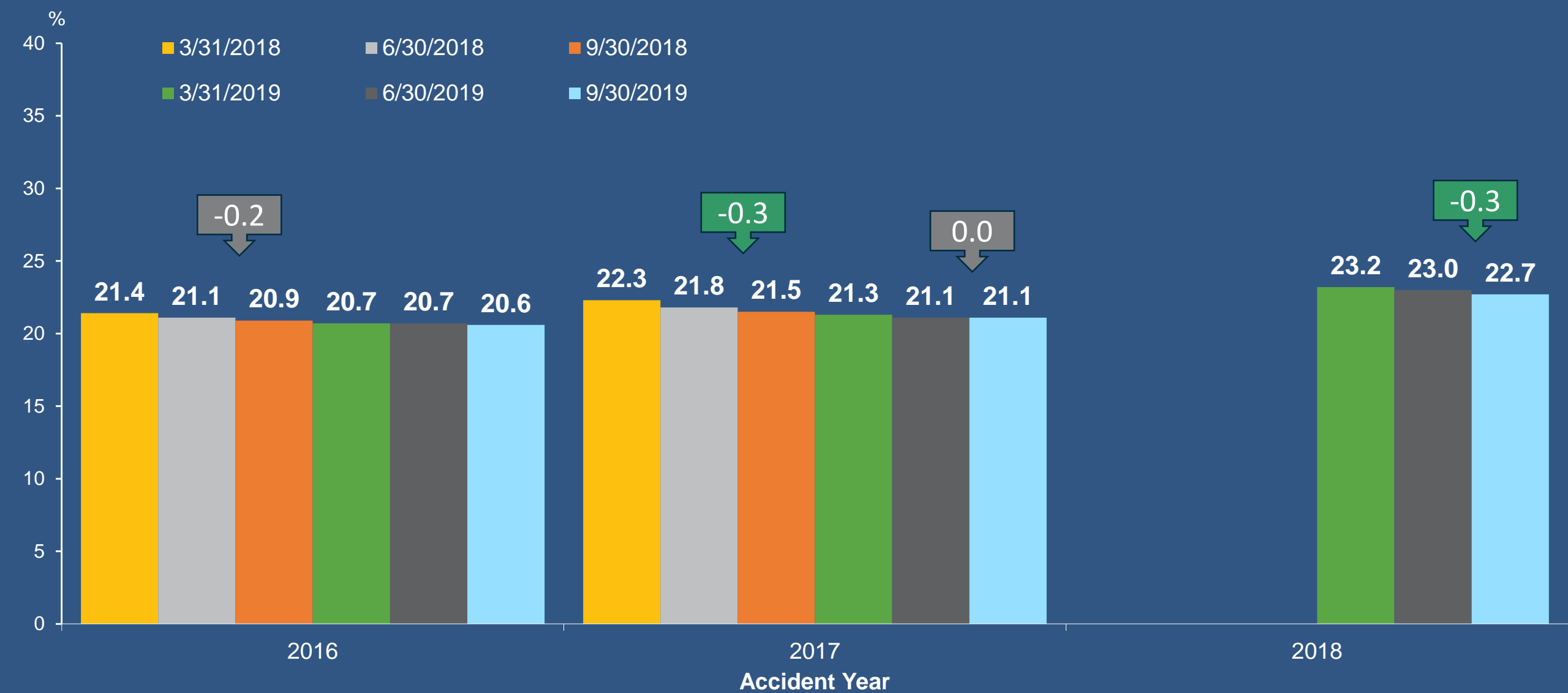
# Cumulative Paid Development from 228 to 360 Months

As of September 30, 2019



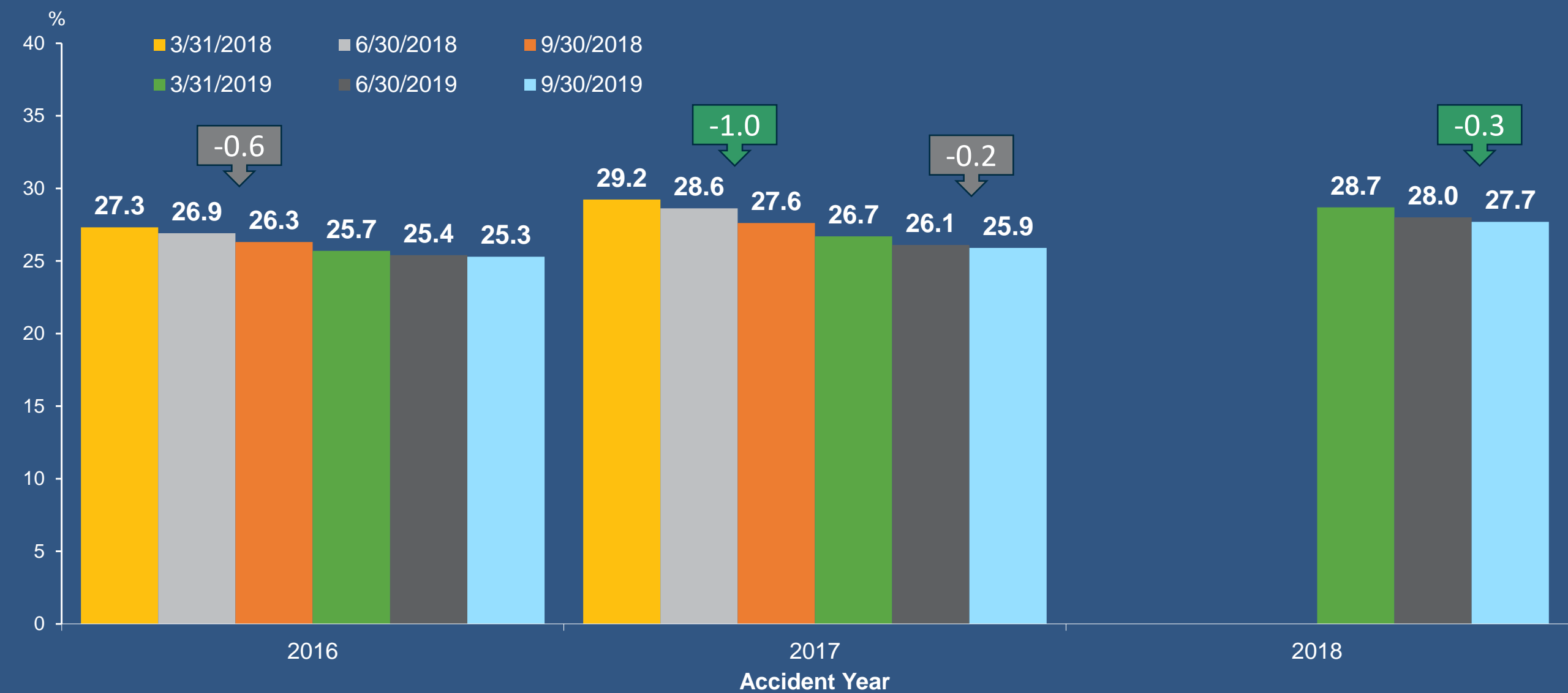
# Projected Ultimate Indemnity Loss Ratios (Exhibit 3.1)

As of September 30, 2019



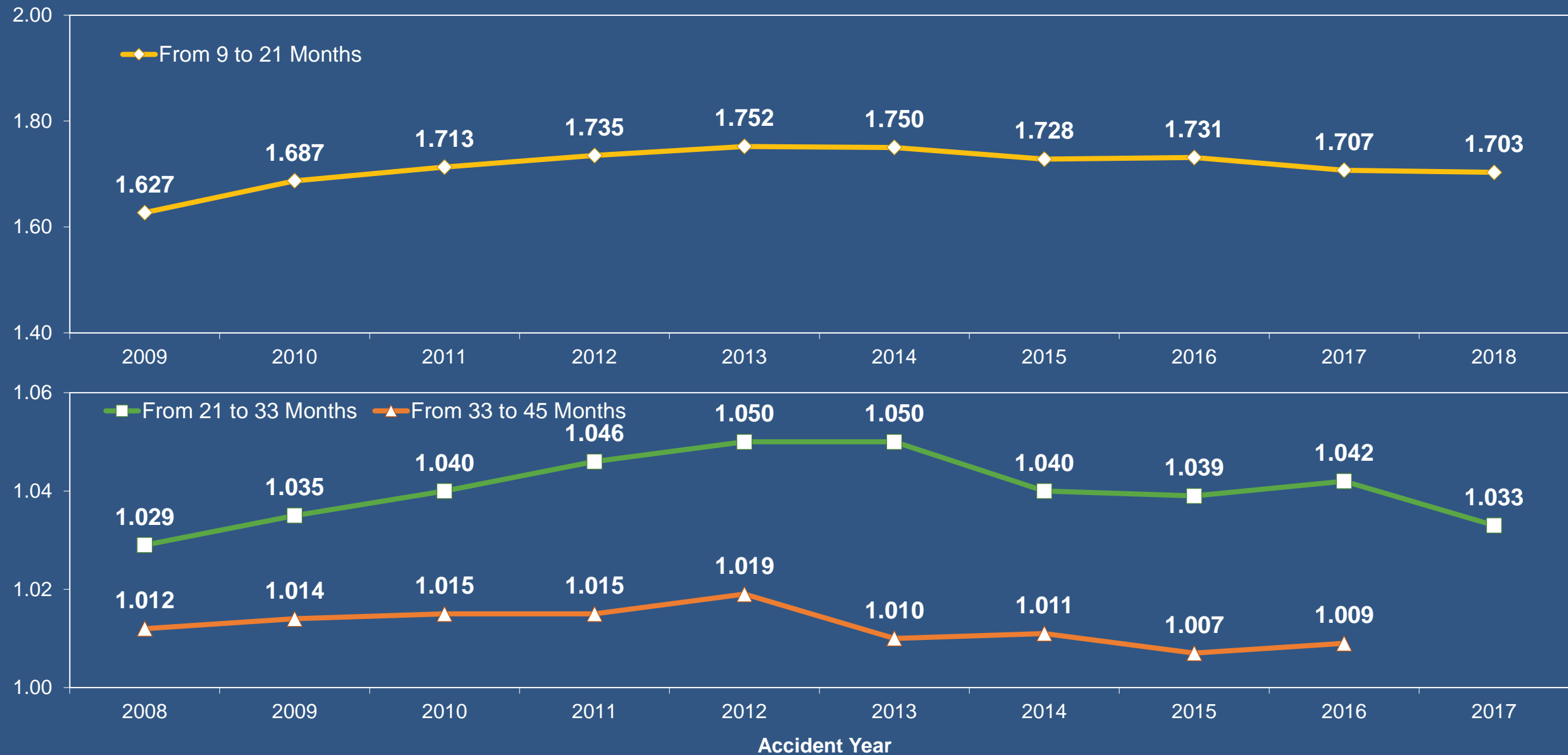
# Projected Ultimate Medical Loss Ratios (Exhibit 3.2)

As of September 30, 2019



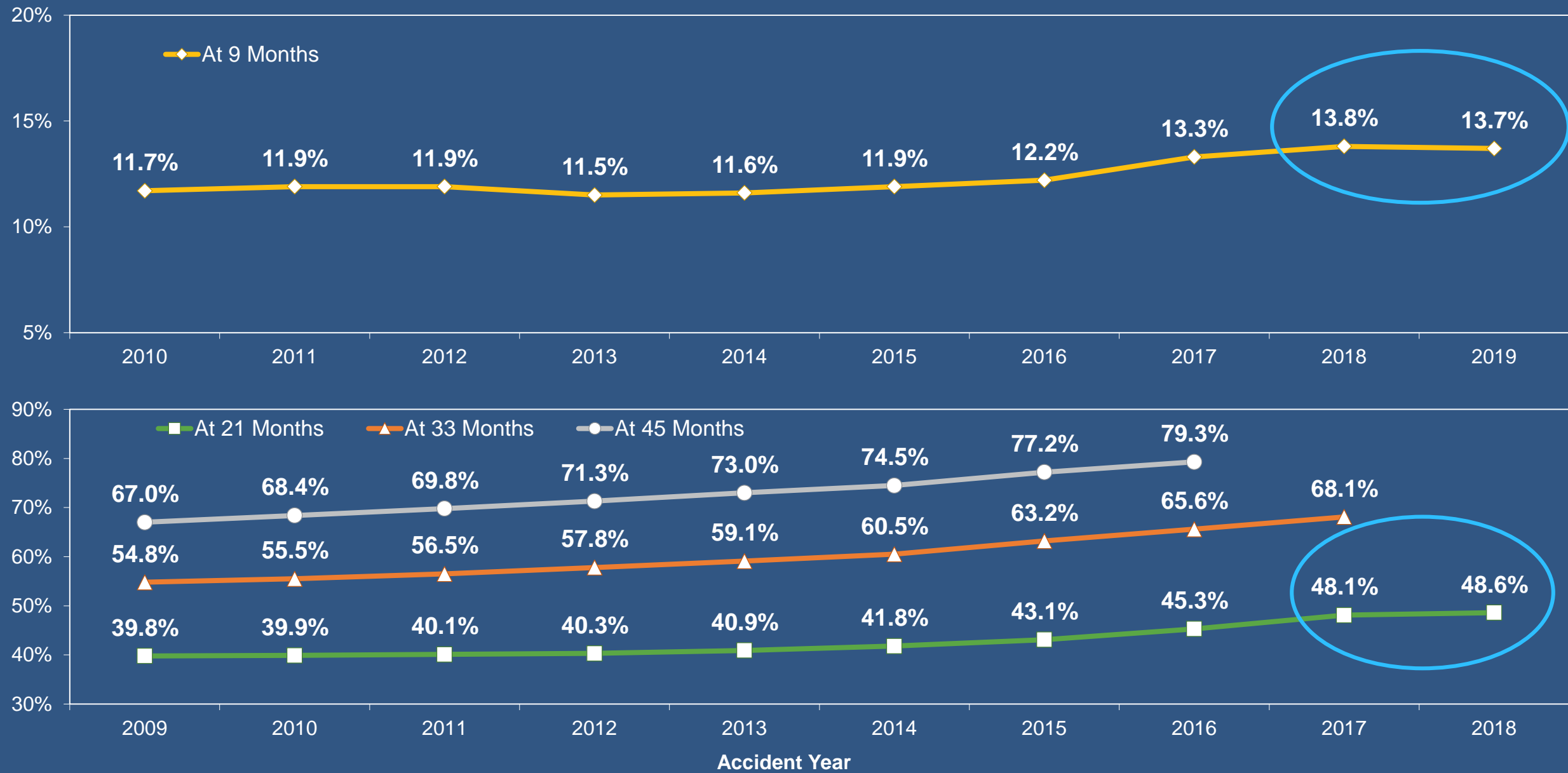
# Indemnity Claim Count Development (Exhibit 10.1)

As of September 30, 2019



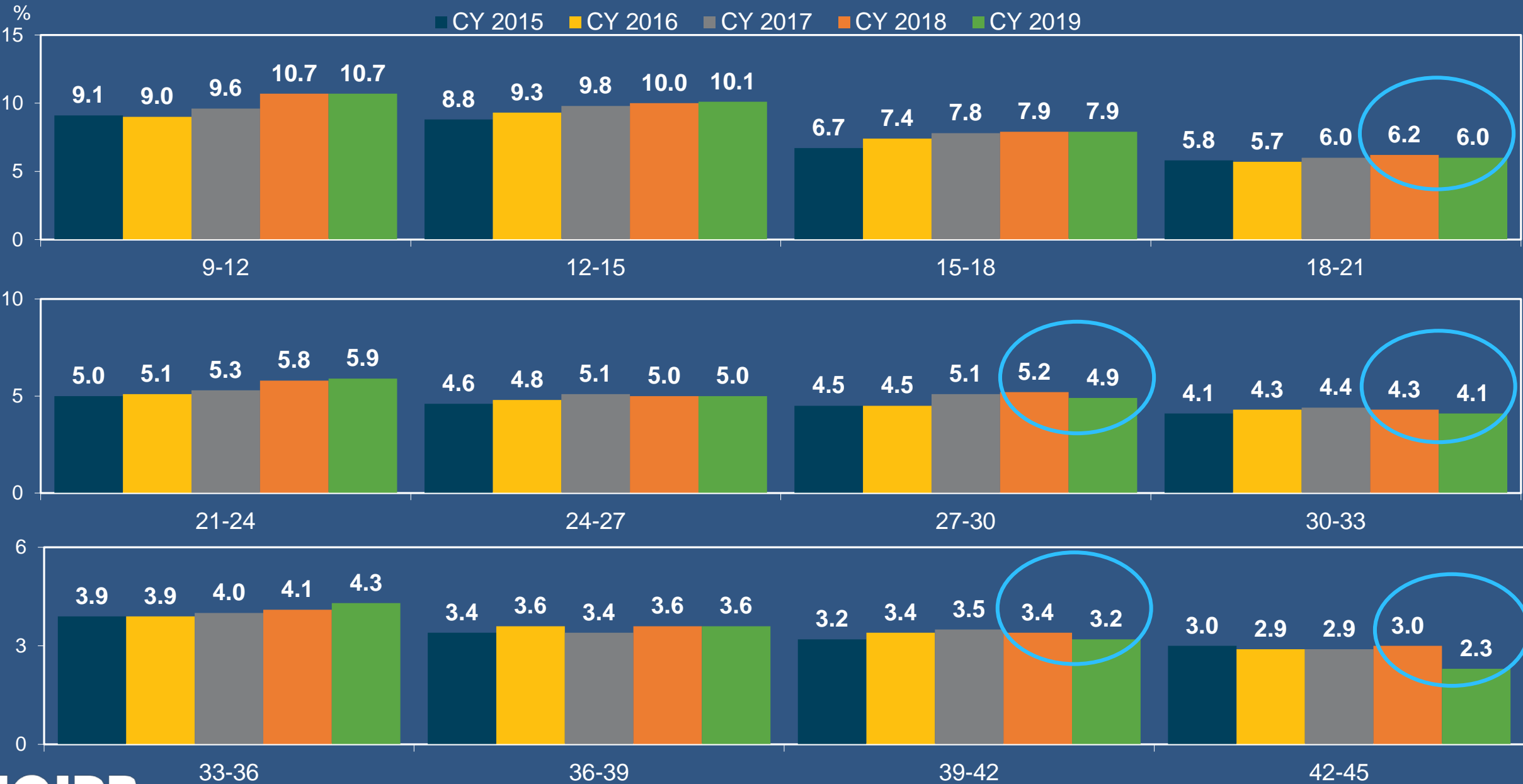
# Ultimate Indemnity Claim Settlement Ratios (Exhibit 11.2)

As of September 30, 2019



# Incremental Indemnity Claim Settlement Ratios

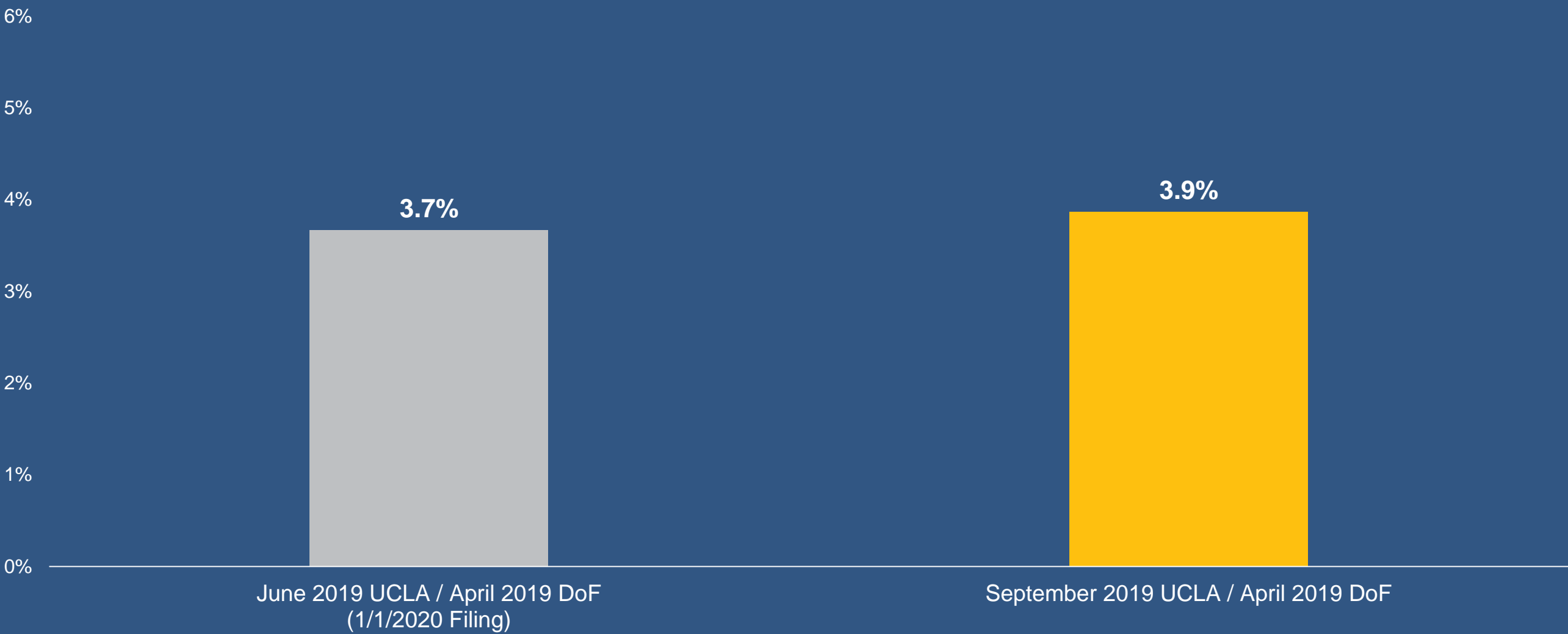
As of September 30, 2019



# Average Annual Wage Level Change Forecast (Exhibit 5.1)

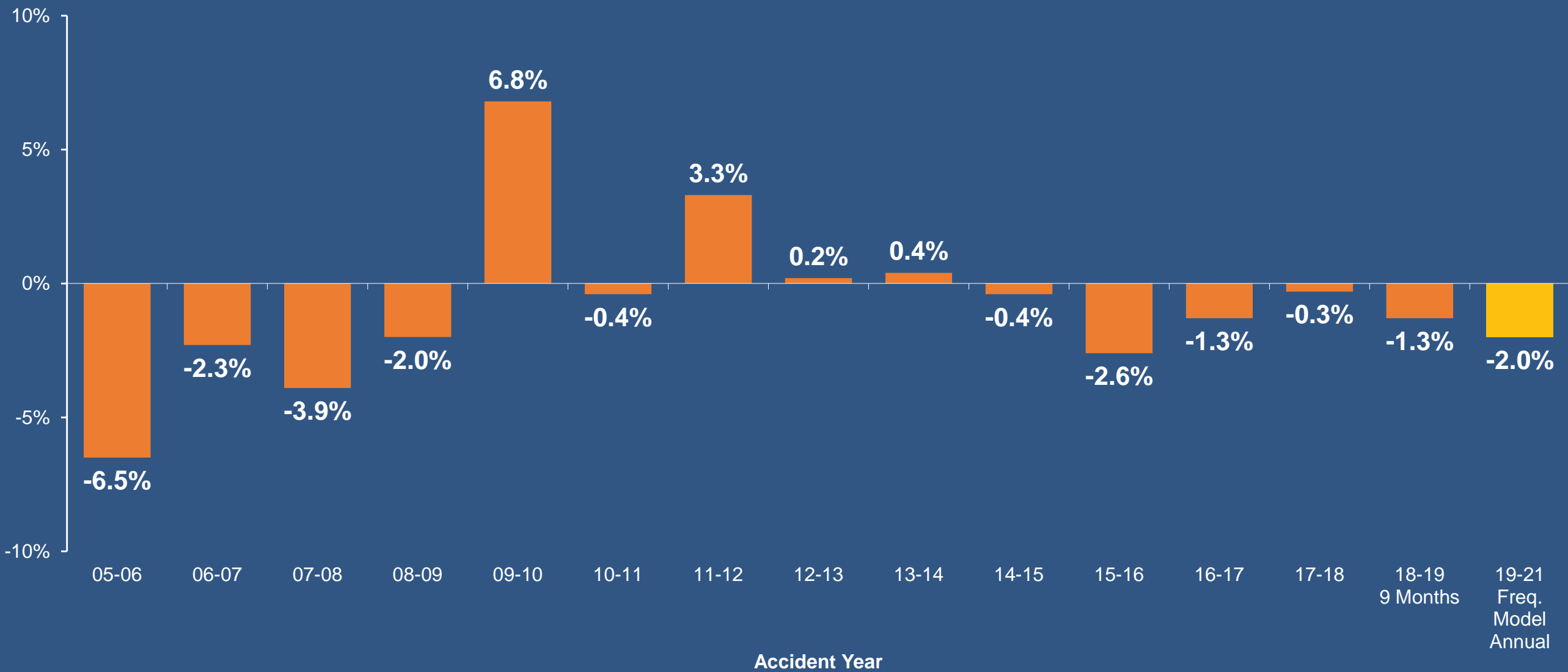
As of September/April 2019

Annualized Wage Level Change from  
Average of Latest Two Accident Years to Projected Policy Period



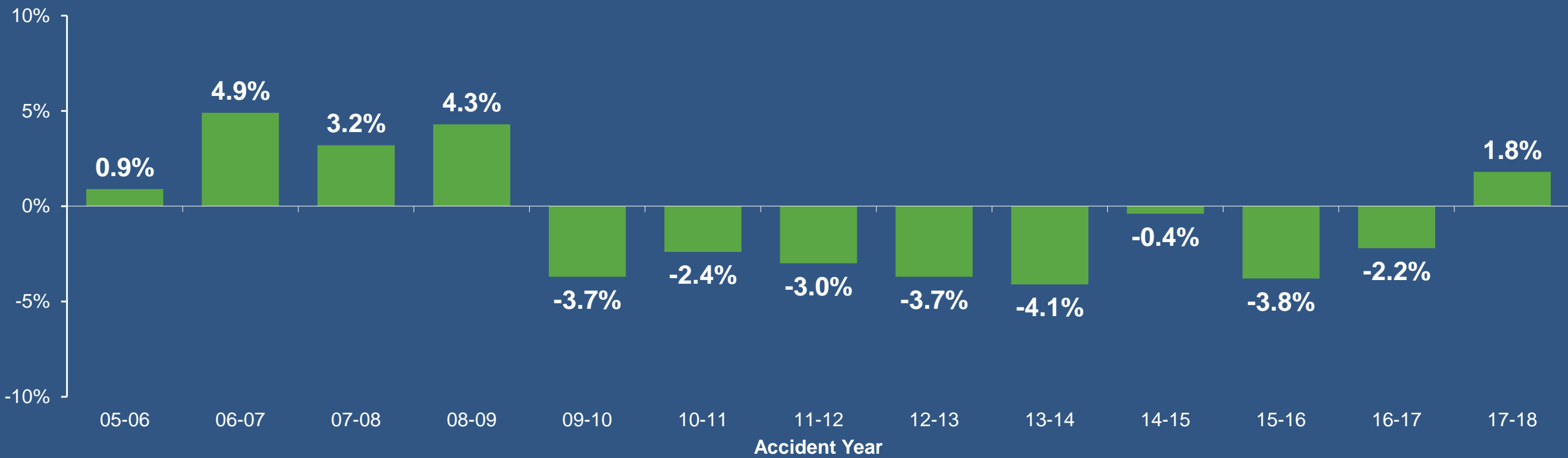
# Projected Changes in Indemnity Claim Frequency (Exhibits 6.1 & 12)

As of September 30, 2019



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

As of September 30, 2019



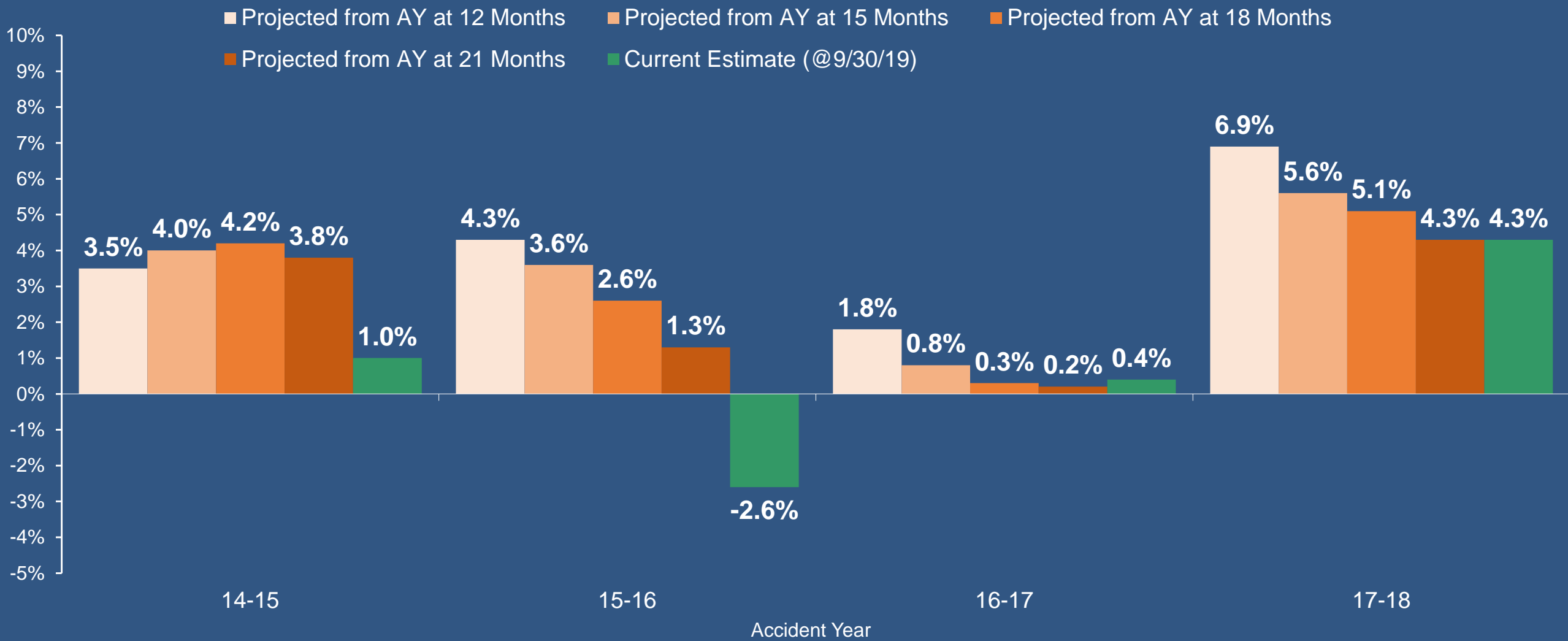
Annual Exponential Trend Based on:

- 1990 to 2018: +1.3%
- 2005 to 2018: -1.3%
- 2014 to 2018: -1.5%

1/1/2020 Filing Selected: -0.5%

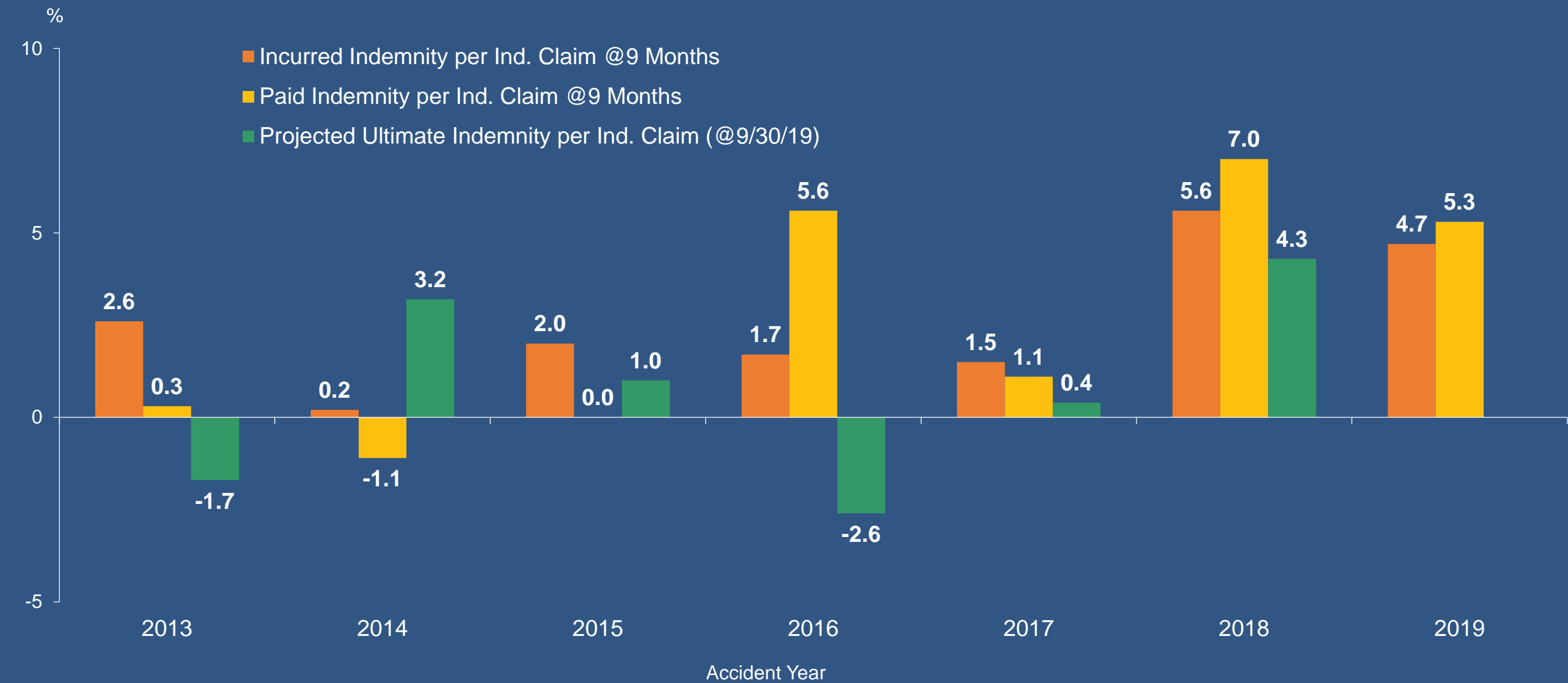
# Indemnity Severity Changes Projected from Early Evaluations Compared to Current

As of September 30, 2019



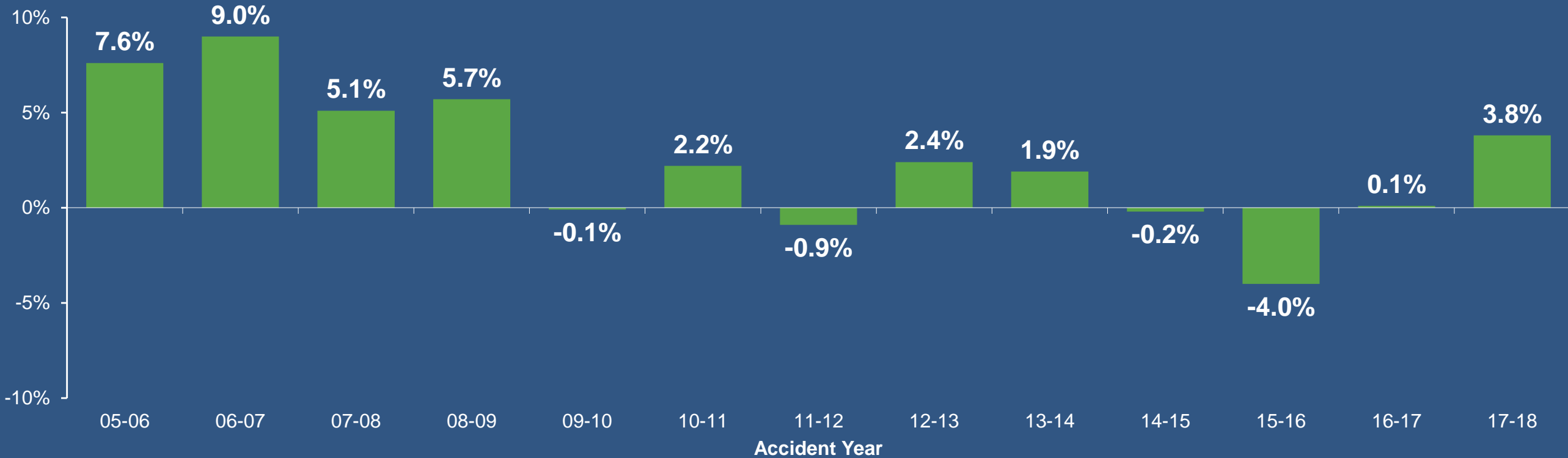
# Indemnity Severity Changes at 9 Months Compared to Ultimate

As of September 30, 2019



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

As of September 30, 2019



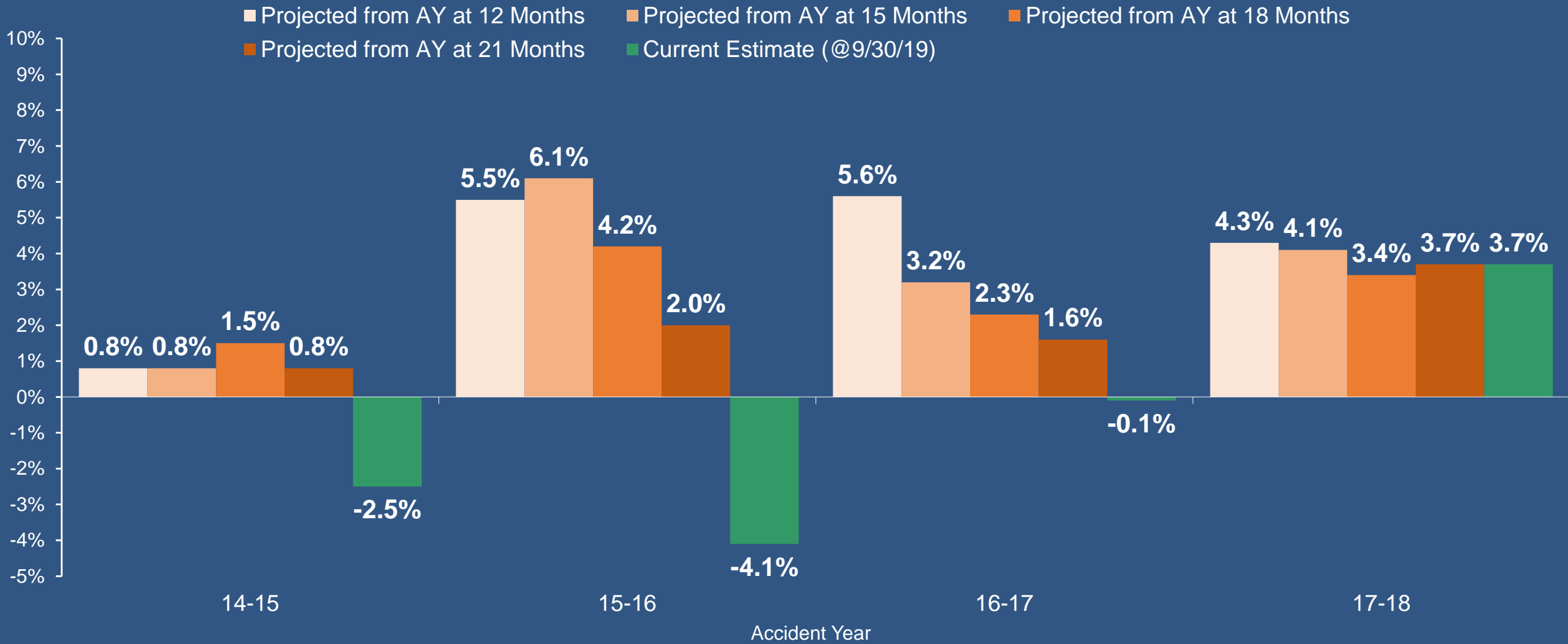
## Annual Exponential Trend Based on:

- 1990 to 2018 (Incl. MCCP): +5.7%
- 2005 to 2018: +1.9%
- 2014 to 2018: -0.5%

1/1/2020 Filing Selected: 2.5%

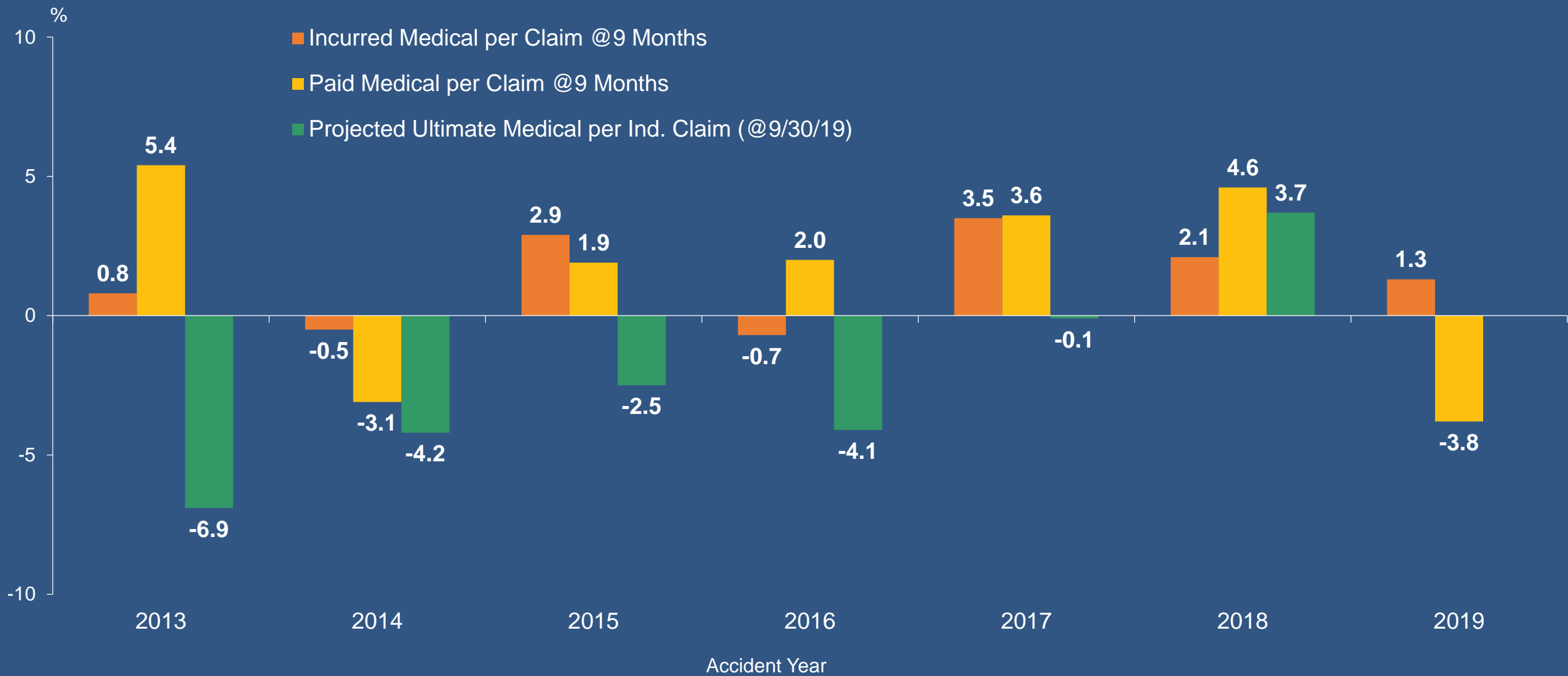
# Medical Severity Changes Projected from Early Evaluations Compared to Current

As of June 30, 2019



# Medical Severity Changes at 9 Months Compared to Ultimate

As of September 30, 2019

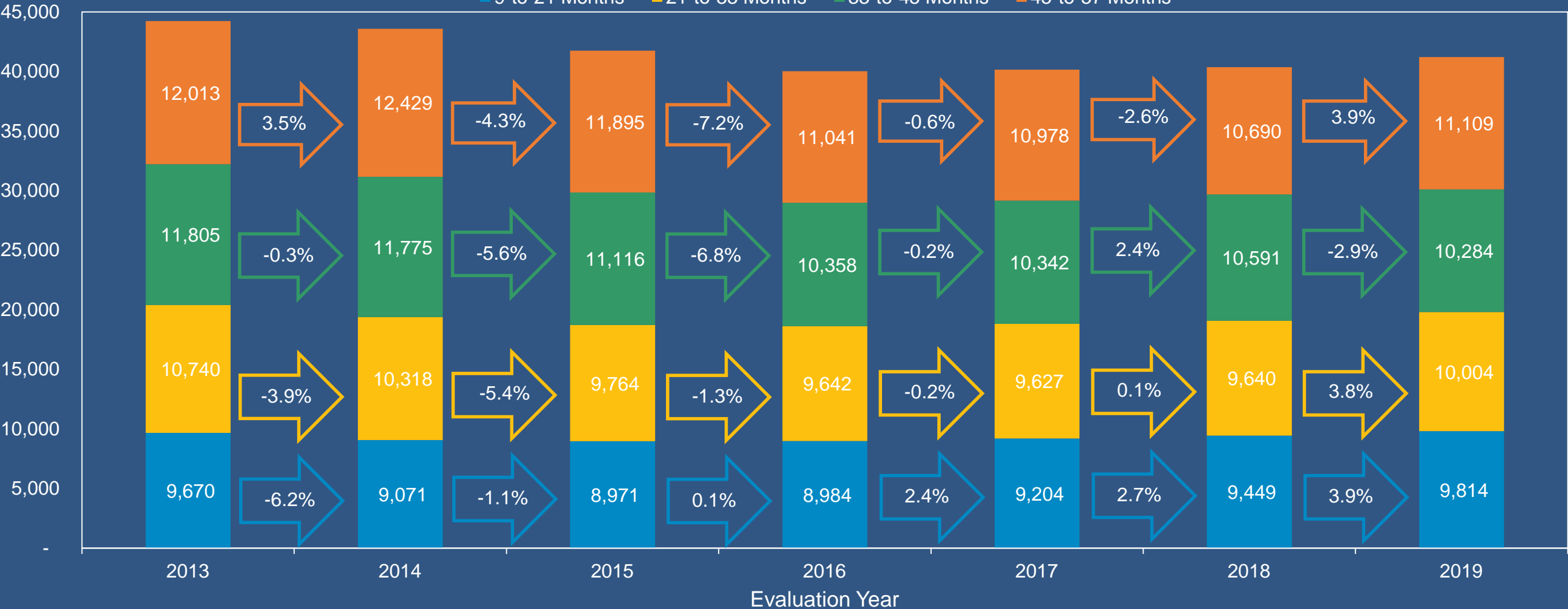


# Incremental Paid Medical per Open Indemnity Claim During the Development Period

As of September 30, 2019

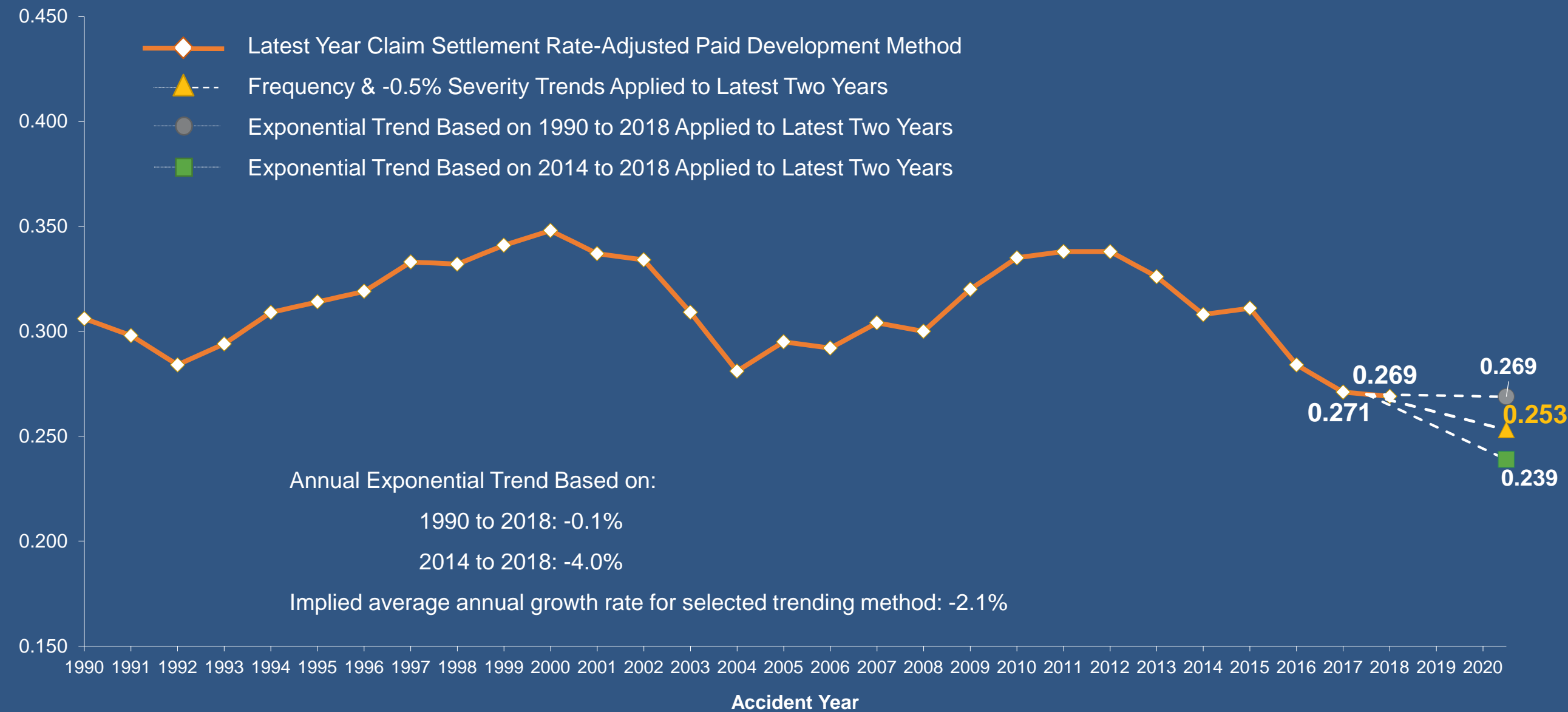
Average Paid Medical per Open Indemnity Claim during the Development Period

■ 9-to-21 Months ■ 21-to-33 Months ■ 33-to-45 Months ■ 45-to-57 Months



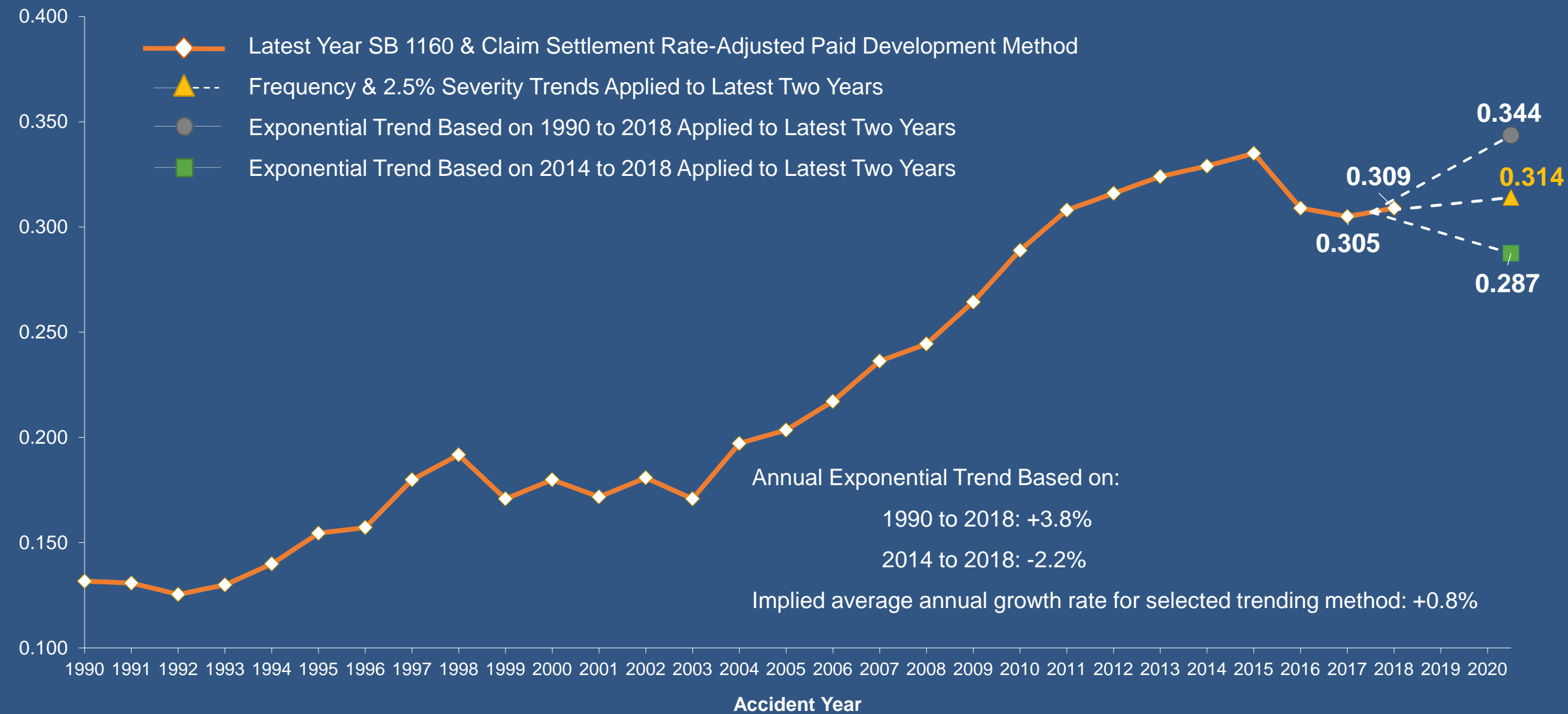
# Projected On-Level Indemnity Loss Ratios (Exhibit 7.1)

As of September 30, 2019



# Projected On-Level Medical Loss Ratios (Exhibit 7.3)

As of September 30, 2019



# 07

## Review of ULAE Projection Methods

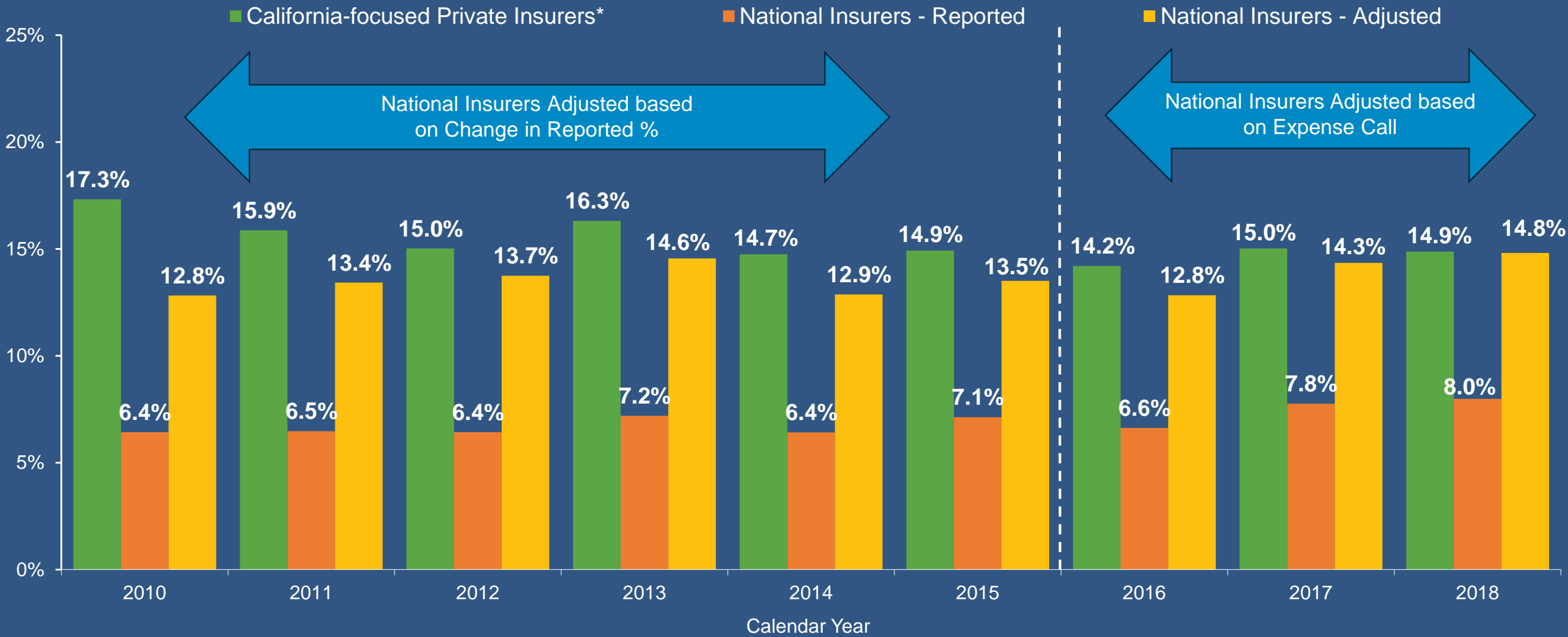


# Background

- Changes made to Expense Call in 2015 and 2017 to collect data to more appropriately apportion countrywide ULAE amounts to California
- Comprehensive review of ULAE projection methodology not undertaken for a number of years
- Current ULAE projection methods primarily based on paid ULAE as a function of:
  - Open indemnity claim counts (Open Count Method)
  - Paid loss amounts (Paid Loss Method)
  - These bases were tested and continue to be highly correlated with paid ULAE (Exhibit 6)

# Ratios of Paid ULAE to Paid Losses (Exhibit 3.1)

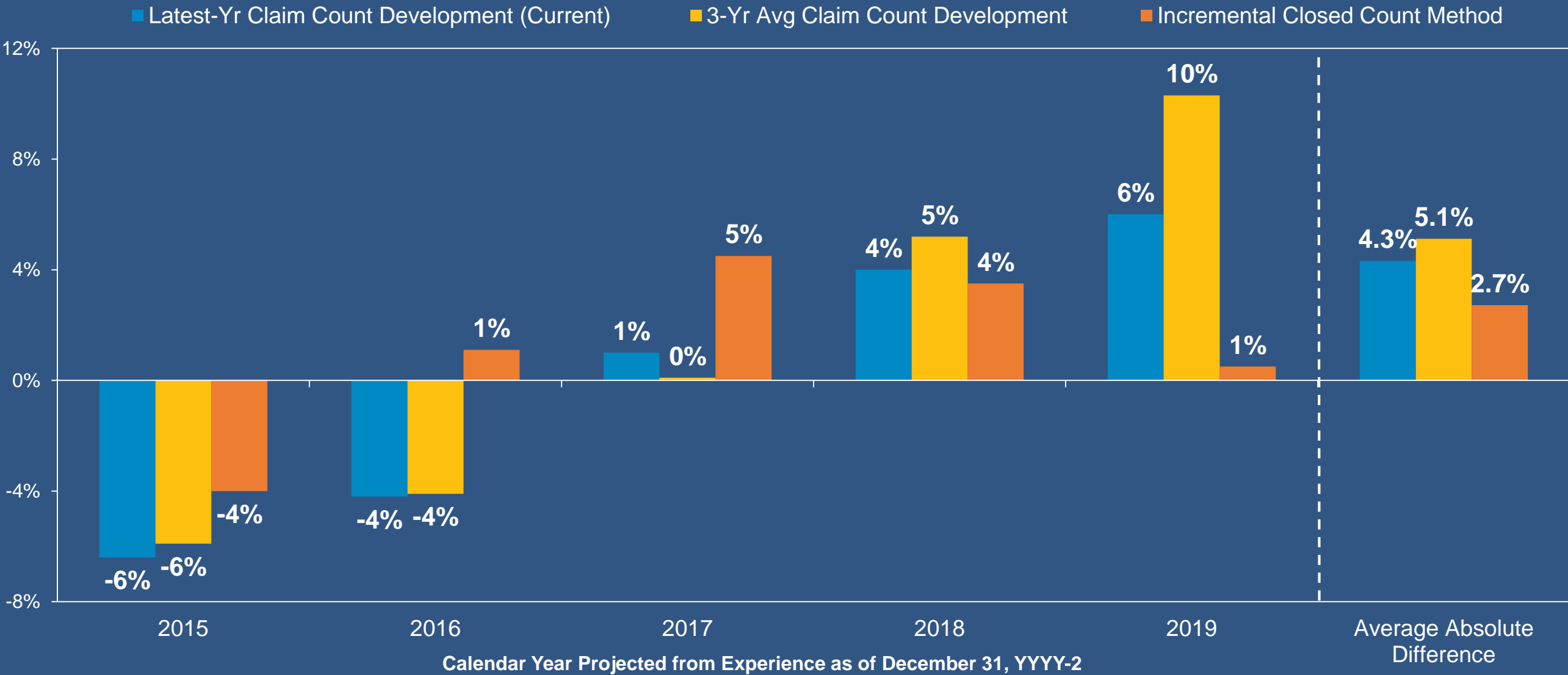
As of December 31, 2018



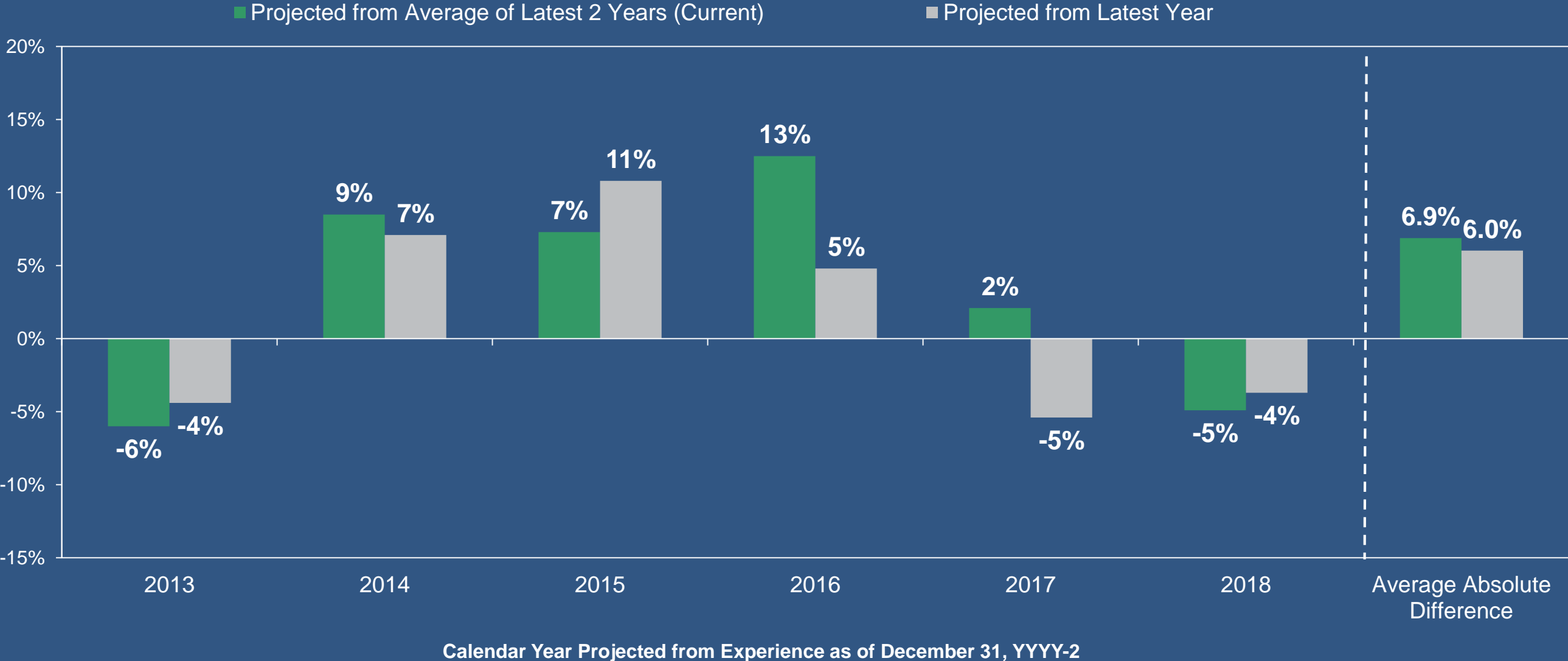
# Overview of Open Count Method

- Open Indemnity Claims at Beginning of Calendar Year
  - Ultimate number of indemnity claims by AY projected using latest year development factor
  - Future AY ultimate counts projected using WCIRB claim frequency forecasts
  - Number of open claims at each CY estimated using [latest year open %] X [ultimate number of indemnity claims]
- Calendar Year Paid ULAE per Open Indemnity Claim
  - Uses private insurers only
  - Projections based on blend of UCLA Anderson and CA Department of Finance average wage level changes
- Projected Policy Year ULAE
  - Trend to future CYs based on average of latest two CYs
  - (# of open indemnity claims) X (paid ULAE per open indemnity claim)
  - Paid ULAE per open claim projected out to approx. average ULAE payment date on 2020 policies

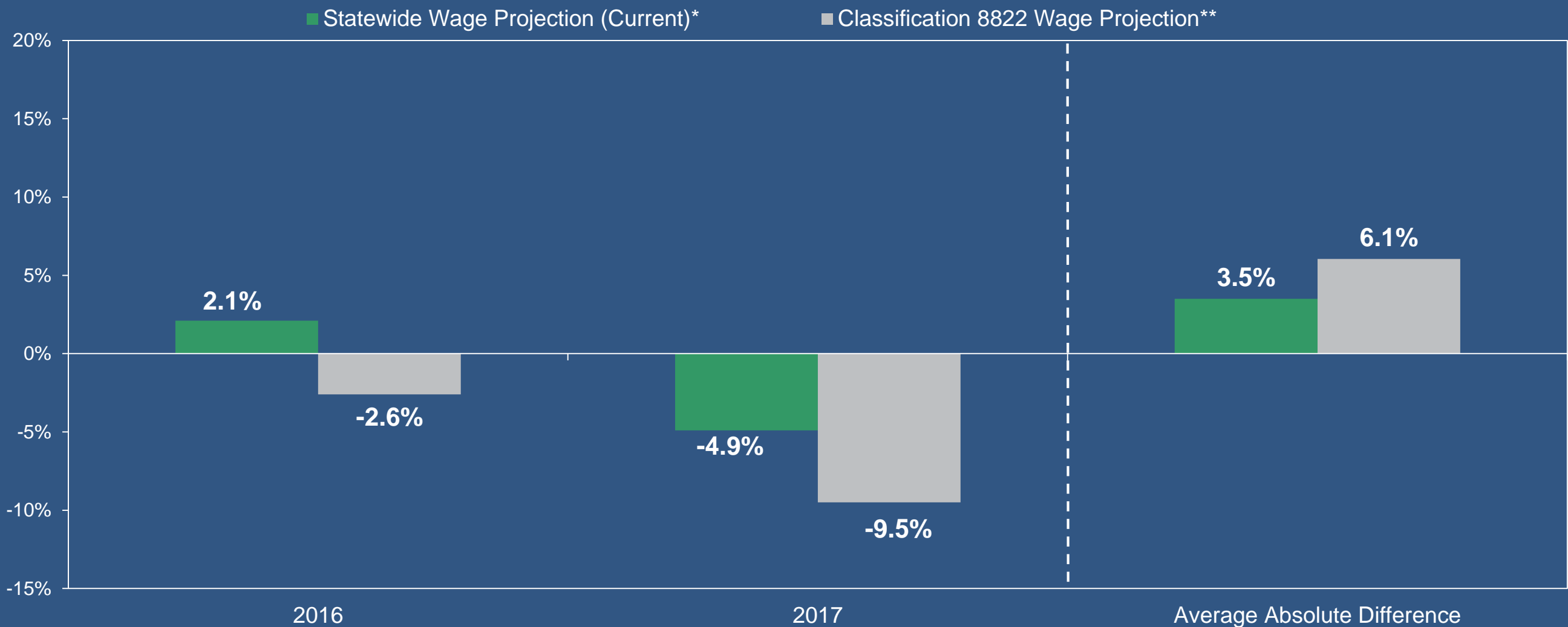
# Comparison of % Error in Projected Number of Open Claims at Beginning of the Calendar Year (Exhibit 4.1)



# Comparison of % Error in Projected CY Paid ULAE per Open Indemnity Claim (Exhibit 4.2)



# Comparison of % Error in Projected CY Paid ULAE per Open Indemnity Claim (Exhibit 4.3)

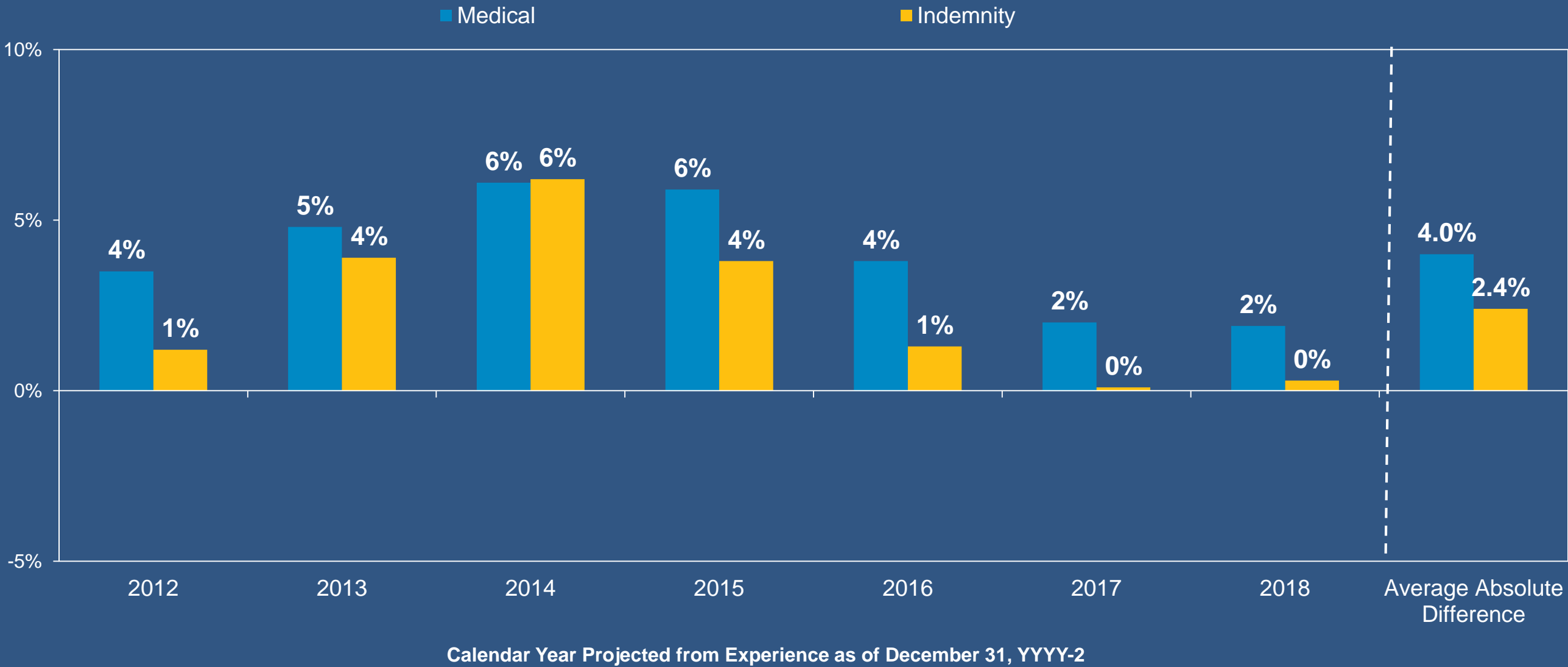


Calendar Year Projected from Experience as of December 31, YYYY-2

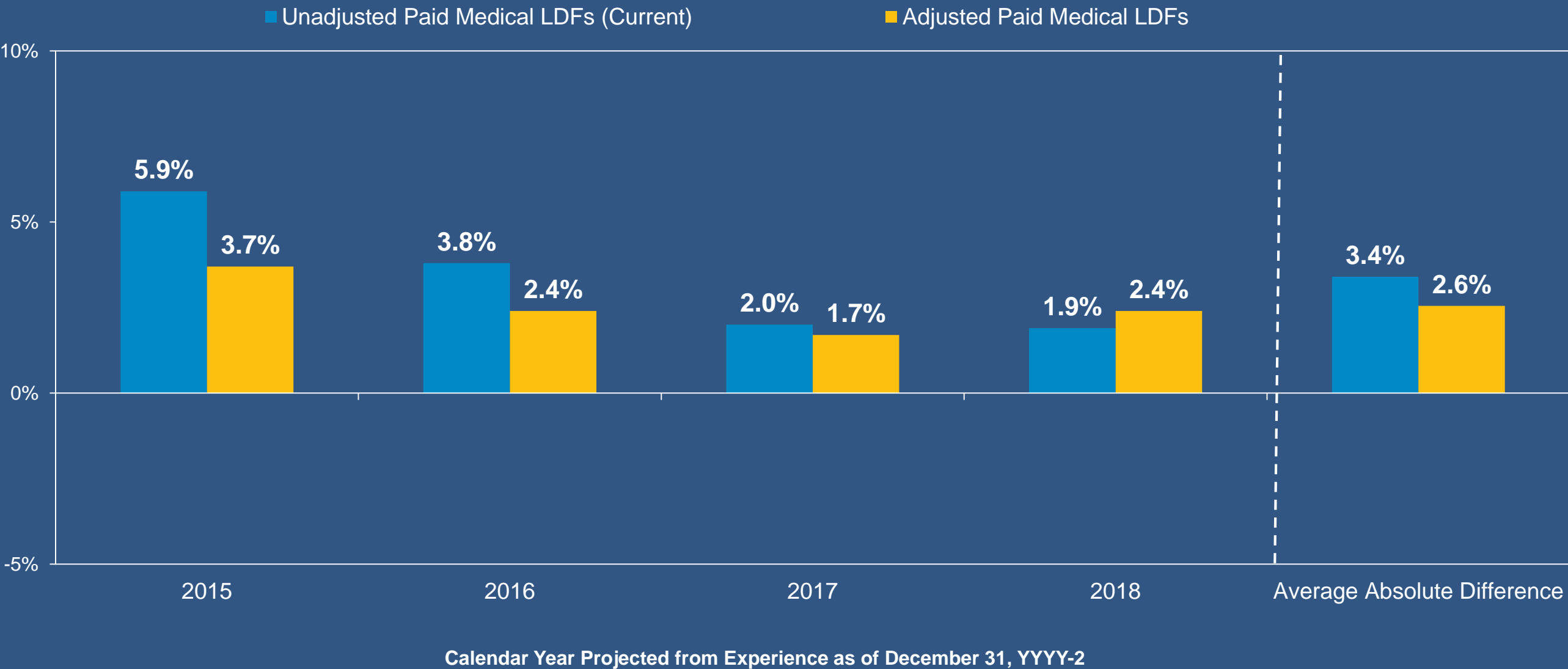
# Overview of Paid Loss Method

- Paid ULAE to Paid Loss Ratio
  - Uses private insurers only
  - Projected using average of latest two CYs (no trend applied)
- Paid Loss to Premium Ratio
  - Projected using latest year unadjusted paid loss development
  - Future AYs projected using current ultimate loss ratio projections
- Projected Policy Year ULAE to Loss Ratio
  - Projected ULAE ratio to premium = [paid ULAE to paid loss ratio] X [paid loss to premium ratio]
  - Final projection = Average of ratios for (CY=PY, CY=PY+1)

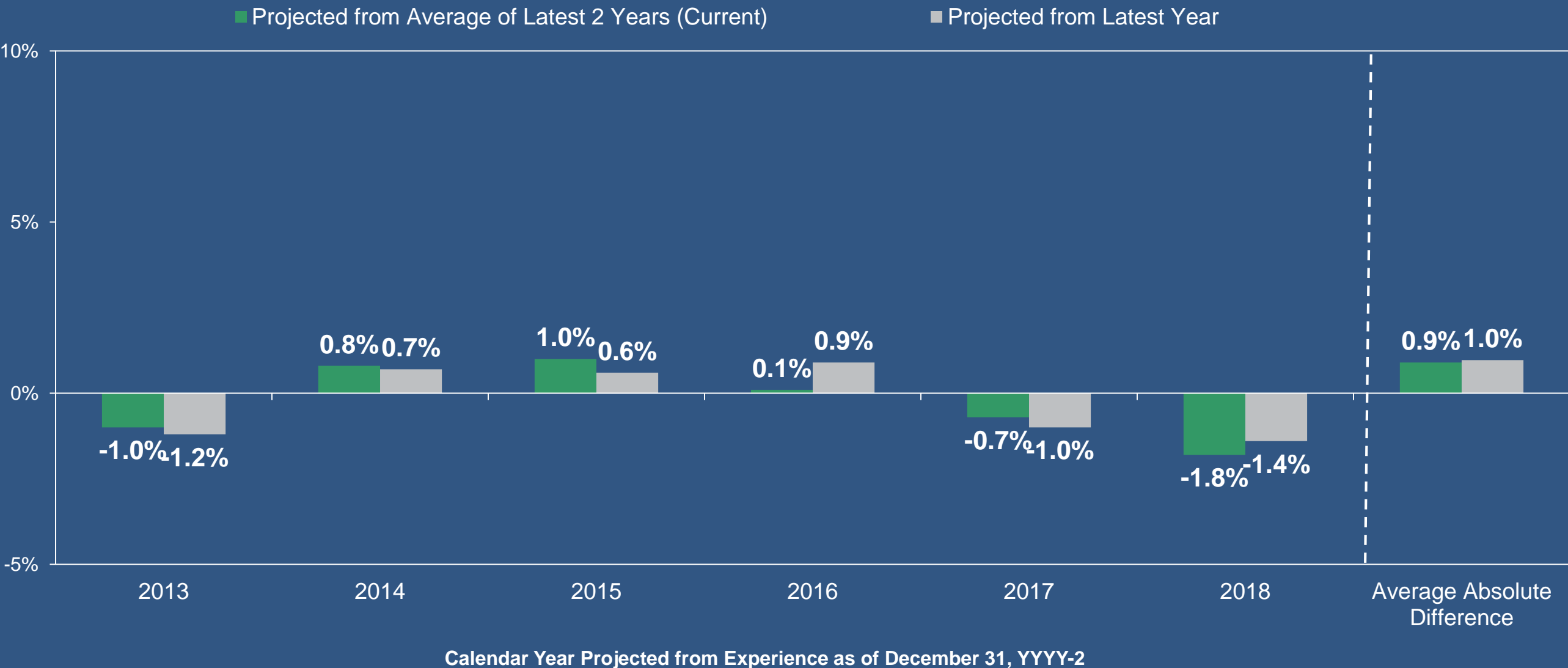
# Comparison of % Error in Projected Calendar Year Paid Loss Ratios (Exhibit 5.1)



# Comparison of % Error in Projected Calendar Year Medical Paid Loss Ratios – With Adjusted Development Factors (Exhibit 5.2)

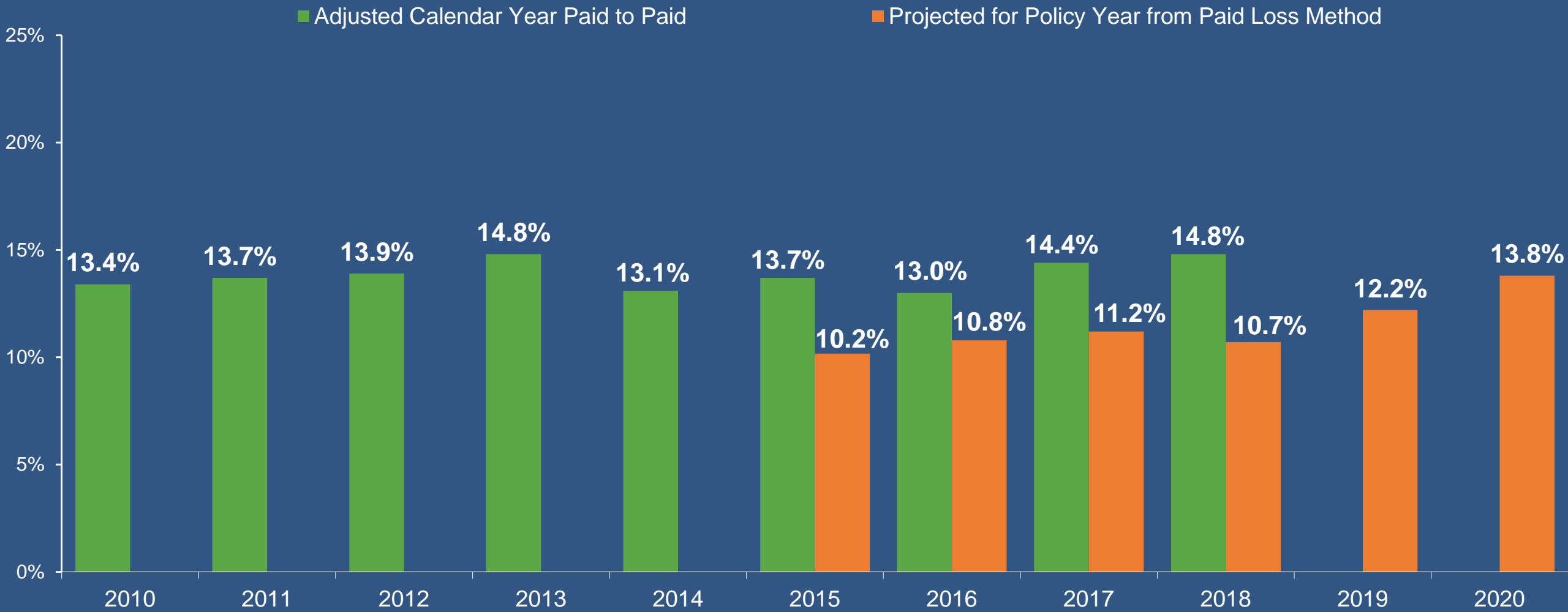


# Comparison of % Difference in Projected Calendar Year ULAE to Loss Ratios (Exhibit 5.3)



# Adjusted Ratios of Paid ULAE to Paid Losses

As of December 31, 2018



# Summary

- Open Count Method
  - Paid ULAE continues to be highly correlated with open indemnity claim counts
  - Projecting the open counts incrementally rather than based on the estimated ultimate number of claims improves the accuracy of the open count projection
  - No alternative ULAE severity projection was more viable than the current statewide wage projection method
- Paid Loss Method
  - Paid ULAE continues to be highly correlated with paid losses
  - Projections of CY paid loss ratios have generally been overstated
  - CY paid-to-paid ULAE ratios have been generally stable (after adjusting for recent Expense Call changes)
  - Projection based on CY paid-to-paid ratios is simpler and more transparent
- Next Steps
  - Staff to finalize recommended enhancements prior to next annual filing
  - Staff continuing to review alternative bases to project ULAE

# 08

## Update on Wage Report



# 09

## Assembly Bill No. 5



# Assembly Bill No. 5

- Dynamex Decision Issued by California Supreme Court – April 2018
  - Applies “ABC” Test to Determine if Worker an Independent Contractor for Wage & Hour Issues
    - worker free from control and direction of hirer
    - worker performs work outside of usual course of hiring entity’s business
    - worker engaged in independently established business of the same nature
  - Dynamex Not Applicable to WC Determinations
- AB 5 – Signed by Governor Newsom on September 18, 2019
  - Establishes Rules for Wage & Hour, Unemployment and WC based on Dynamex “ABC Test”
  - WC Provisions Apply as of July 1, 2020 (applies to in-force policies but not retroactively)
  - A Number of Occupations are Exempted (or partially exempted)
  - Future “Clean-up” Amendments, Court Challenges and Ballot Initiative Expected
- Pure Premium Ratemaking Concerns
  - Overall impact
  - Basis of premium issues
  - Potential impact on premium adjustments

# 10

## Review of Incremental Loss Development Methods

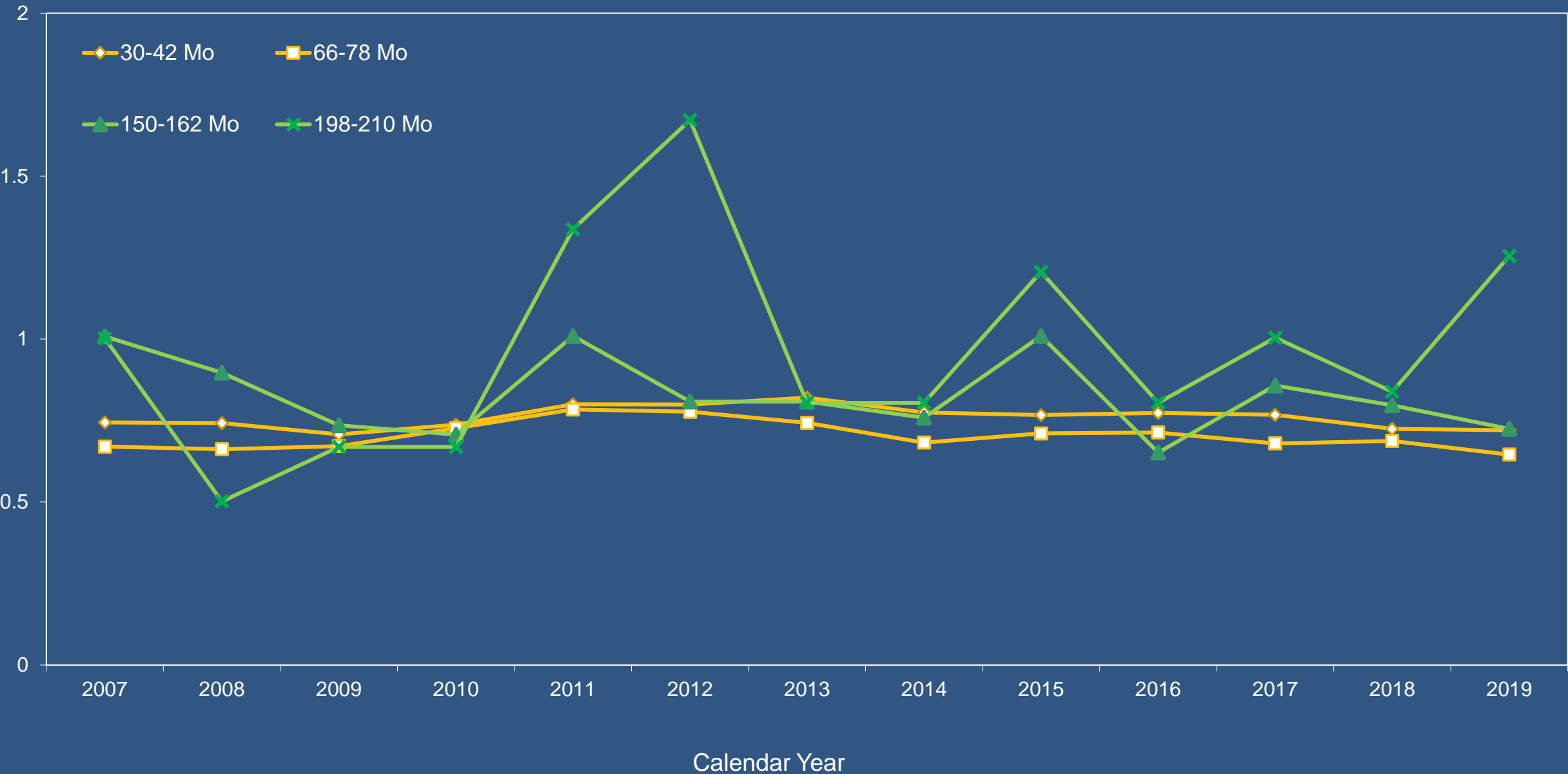


# Background of Incremental Loss Development Methods

- The chain-ladder method can be distorted by changes in benefit level or reforms, changing claim settlement rates, or other shifts in costs
- Incremental development methods can react more quickly when cost levels or historical patterns change unexpectedly
- Multiplicative incremental method uses ratios of current incremental paid to prior incremental paid to project future payments
  - It is less impacted by the changes in the past
- Challenges with multiplicative incremental approach
  - Decay ratios are distorted in the period immediately following a one-time change
  - Decay ratios can be volatile and non-intuitive, especially at later maturities

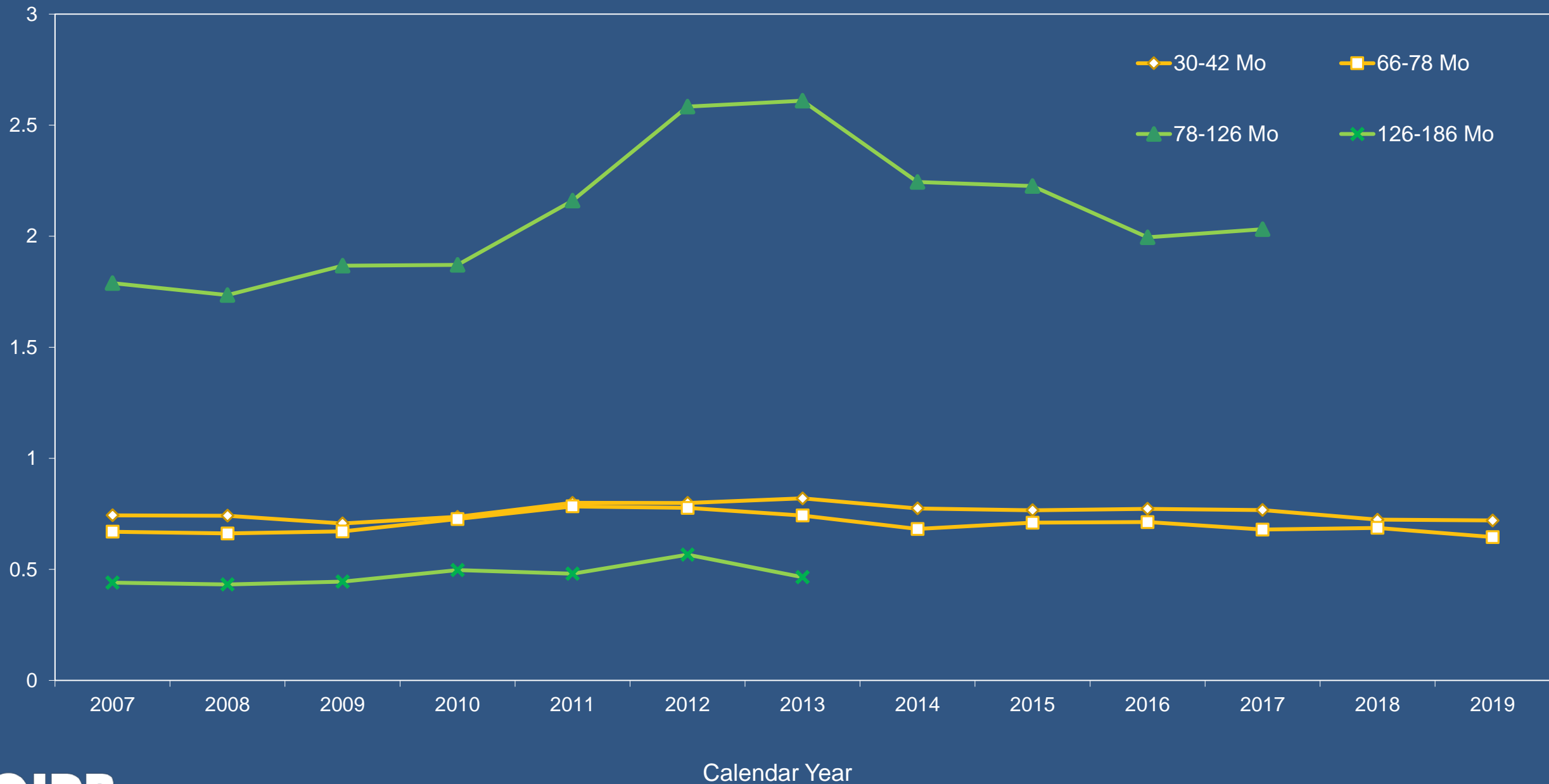
# Incremental Paid Indemnity to Prior Incremental Paid Indemnity Ratios (Exhibit 1.1)

As of June 30, 2019



# Incremental Paid Indemnity to Prior Incremental Paid Indemnity Ratios Combined at Mature Ages (Exhibit 1.2)

As of June 30, 2019



# Projected Indemnity Age-to-Age Development Factors Using Incremental Multiplicative Method (Exhibit 1.3)

As of June 30, 2019

Age	Age-to-Age Factors Using Incremental Method	Age-to-Age Factors Using Current Method	Difference
18-30	1.994	1.986	0.4%
30-42	1.359	1.337	1.7%
42-54	1.162	1.146	1.4%
54-66	1.088	1.080	0.8%
66-78	1.052	1.049	0.4%
78-126	1.104	1.127	-2.1%
126-186	1.044	1.060	-1.6%
186-246	1.020	1.020	-0.1%

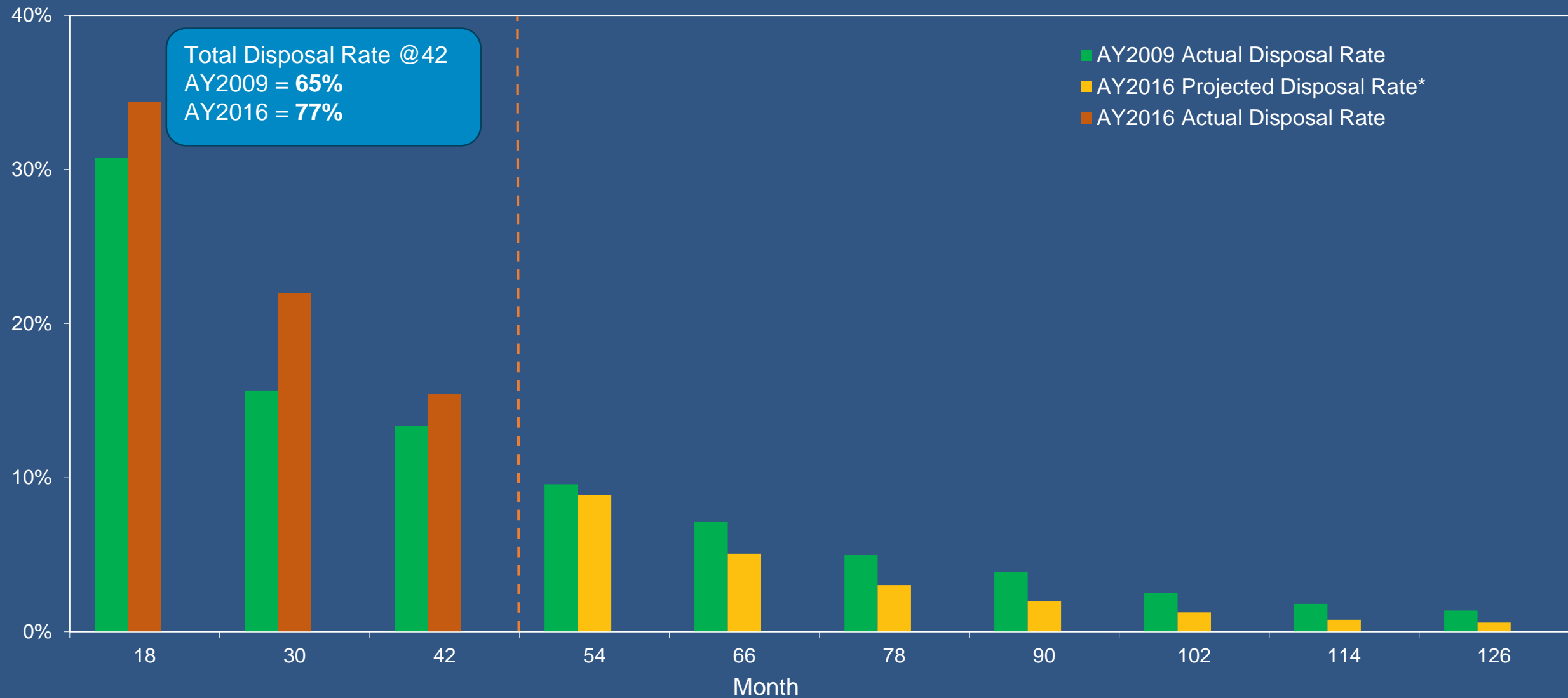
Total 18-to-246 Difference: 0.8%

# Summary of Additive Incremental Method

- The additive incremental method is based on projecting incremental severity and frequency separately
  - It is particularly useful for the periods immediately following a one-time change
  - Highly dependent on the projection base which impacts the volatility and credibility of the mature ages
- Open indemnity claim count is chosen as the projection base in approach reviewed by staff
  - Less claims are projected to be open for recent accident years at mature periods as a result of the recent acceleration in claim settlement ratio
- Incremental paid development = (# of open indemnity claims) x (incremental paid per open claim)
  - # of open indemnity claims projected based on latest year claim settlement pattern
  - Incremental paid per open claim projected based on average of latest three years (on-leveled)

# Projection of Ultimate Incremental Disposal Rates (Exhibit 2.2)

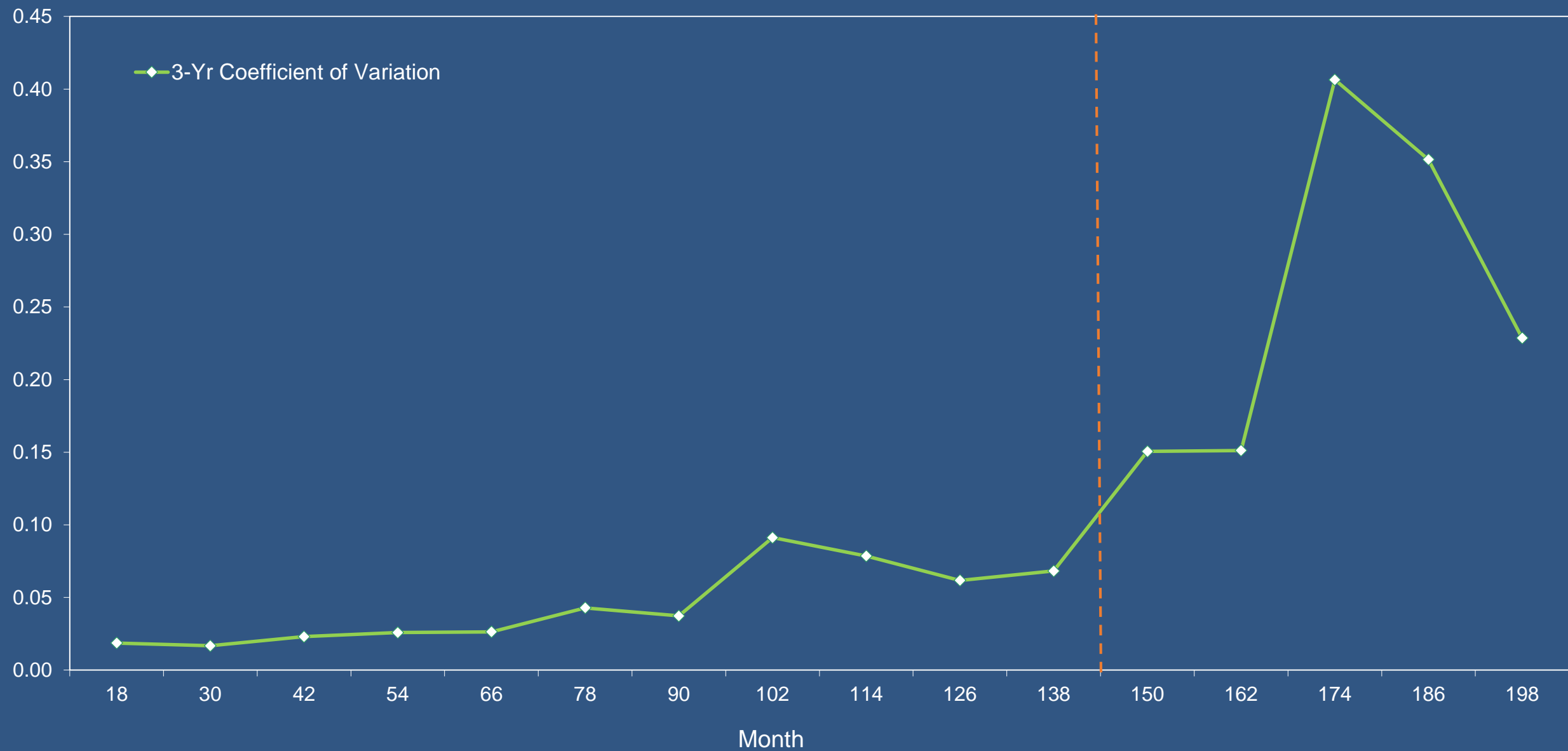
As of June 30, 2019



\* Projected incremental disposal rates are based on the projected closed indemnity counts divided by the ultimate indemnity claim counts. The projected closed indemnity counts are based on the latest year number of indemnity claims closed as a ratio to prior number of open claims.

# On-Leveled Incremental Paid Indemnity per Estimated Open Indemnity Claims in the Prior Period (Exhibit 2.3)

As of June 30, 2019



# Projected Indemnity Age-to-Age Development Factors Using Incremental Additive Method (Exhibit 2.4)

As of June 30, 2019

Age	Age-to-Age Factors Using Incremental Method	Age-to-Age Factors Using Current Method	Difference
18-30	1.939	1.986	-2.4%
30-42	1.330	1.337	-0.5%
42-54	1.143	1.146	-0.2%
54-66	1.076	1.080	-0.3%
66-78	1.046	1.049	-0.3%
78-90	1.030	1.042	-1.2%
90-102	1.021	1.035	-1.4%
102-114	1.013	1.023	-1.0%
114-126	1.011	1.022	-1.1%
126-138	1.008	1.017	-1.0%

Total 18-to-138 Difference: -8.9%

# Summary

- The incremental method may be viable for projecting earlier ages where the incremental development is stable
- Staff plans to continue to review, retrospectively test and refine the incremental loss development methods as an alternative approach, particularly how it applies to medical development
- The projected cumulative chain-ladder loss development based on historical accident year payments may be overstated due to the claim settlement acceleration across all maturities. Staff plans to review the impact on the tail projection next year.

# 11

## Potential 2020 Actuarial and Research Projects



# Potential 2020 Actuarial and Research Projects

## Executive Summary

- Actuarial and Research Agenda Reviewed Annually by the Actuarial Committee and Governing Committee
- Potential Projects Segregated by Purpose (e.g., in Response to CDI Directives, in Response to Legislation, Rating Plans)
- Project List to be Reviewed and Approved by Governing Committee at 12/11/19 Meeting

# Potential 2020 Actuarial and Research Projects Highlights

- Studies Arising out of CDI Directives
  - Reporting of Terrorism Information to NAIC and FIO
  - Indemnity Transaction Data
- Cost Impact of Legislative Changes
  - Retrospective Evaluation of Drug Formulary, SB 1160 Utilization Reviews & GPCI
- Studies Directly Impacting Pure Premium Rates
  - Classification Ratemaking – Loss Development
  - Payroll Limitations – Additional Classifications
  - Medical On-Level Adjustments
  - Loss Development Tail
  - Incremental Loss Development Methods
  - ULAE Projection Methodology

# Potential 2020 Actuarial and Research Projects Highlights (Continued)

- Other Studies Indirectly Impacting Pure Premium Rate Projections
  - Analysis of Very Large Claims
  - Frictional Costs in California
  - Cumulative Trauma Claims
  - Physical Medicine
- WCIRB Rating Plans
  - Review of Experience Rating Eligibility
  - Update of Parameters
  - Impact of Experience Rating on Workplace Safety

wcirb.com



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