

WCIRB Actuarial Committee Meeting

June 22, 2021

Agenda

1. AC16-06-05: Update on Medical Severity Trends by Component
2. AC17-12-02: Legislative Cost Monitoring Update – SB 1160 UR Provisions
3. AC21-06-01: 3/31/2021 Experience Review
4. AC21-06-02: Impact of High Deductible Health Plans
5. AC21-06-03: WCIRB Member Analytic Tools

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01

Update on Medical Severity Trends by Component



Summary of the Medical Severity Trends through 2020

As of April 7, 2021

- Pre-COVID-19 (before 3/15)
 - Overall medical severity per claim increased slightly (+4%)
 - Physician services, inpatient and medical-legal costs per claim increased despite a downward trend in prior years
 - Pharmaceutical costs per claim continued to drop (-14%) mostly driven by continuously steep declines in opioid costs (-42%)
 - Telemedicine services per claim increased at typical pre-COVID-19 rate (approximately 100%)
- COVID-19 pandemic period (3/15 – 12/31)
 - Overall medical severity per claim increased (+10%)
 - Increases in both service utilization and paid per transaction likely when shelter-in-place orders were lifted
 - Increases in inpatient and outpatient costs per claim were driven mostly by higher paid per transaction
 - Pharmaceutical costs per claim increased (+14%) mostly driven by increased use of non-opioids
 - Telemedicine services per claim increased by more than 50-fold

02

Legislative Cost Monitoring – SB 1160 UR Provisions



Background - SB 1160 Provisions related to Utilization Review (UR)

- Effective on injuries occurring on 1/1/2018 or after
- Treatment requests are automatically authorized without prospective UR if:
 - within 30 days of the date of injury and meet specified conditions
- Conditions to be met:
 - Accepted body part or condition
 - Performed by a member of the Medical Provider Network (MPN) or Health Care Organization (HCO), or by a designated physician
 - Allowed for in Medical Treatment Utilization Schedule
 - Excluding certain medical treatments
- The WCIRB prospective evaluation in Amended 1/1/2017 Filing
 - 0.1% reduction in total PP from less UR (-2.5% on MCCP costs)
 - 0.1% increase in total PP from more medical services (+0.3% on medical costs)
 - Estimated reduction from less UR offset by the estimated increase from more utilization of medical services
- The WCIRB has conducted a retrospective evaluation of the impact of the SB 1160 UR provisions using two-year post-reform data.

Review of SB 1160 UR Provisions – Analysis Based on 12/31/2020 Experience

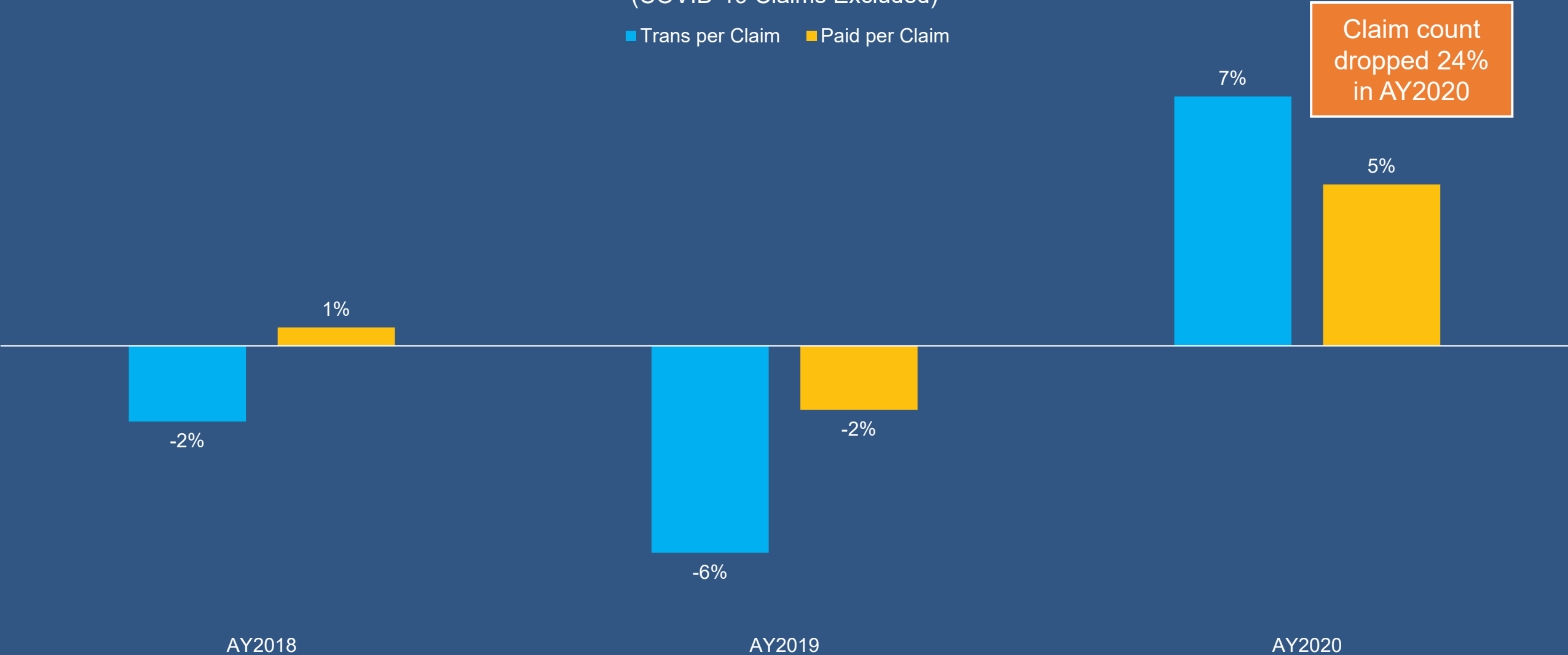
- The WCIRB Medical Transaction Data
 - Claims with accident dates between 1/1 and 12/31 in 2017 through 2020
 - Pre-reform: AY2017
 - Post-reform: AY2018 through AY2019
 - AY2020 heavily affected by the pandemic and shown for information*
 - Identified services excluded from the UR restrictions in the medical data
- Compared the medical service utilization and payments in post-reform to pre-reform period to assess:
 1. Were there increases in utilization of certain types of medical services in the first 30 days of treatment?
 2. Were certain medical services provided earlier?
 3. Did overall utilization of certain medical services change after the first 30 days?
 4. Did utilization review costs decrease?

Overview of the Medical Payments and Transactions in the First 30 Days

As of June 1, 2021

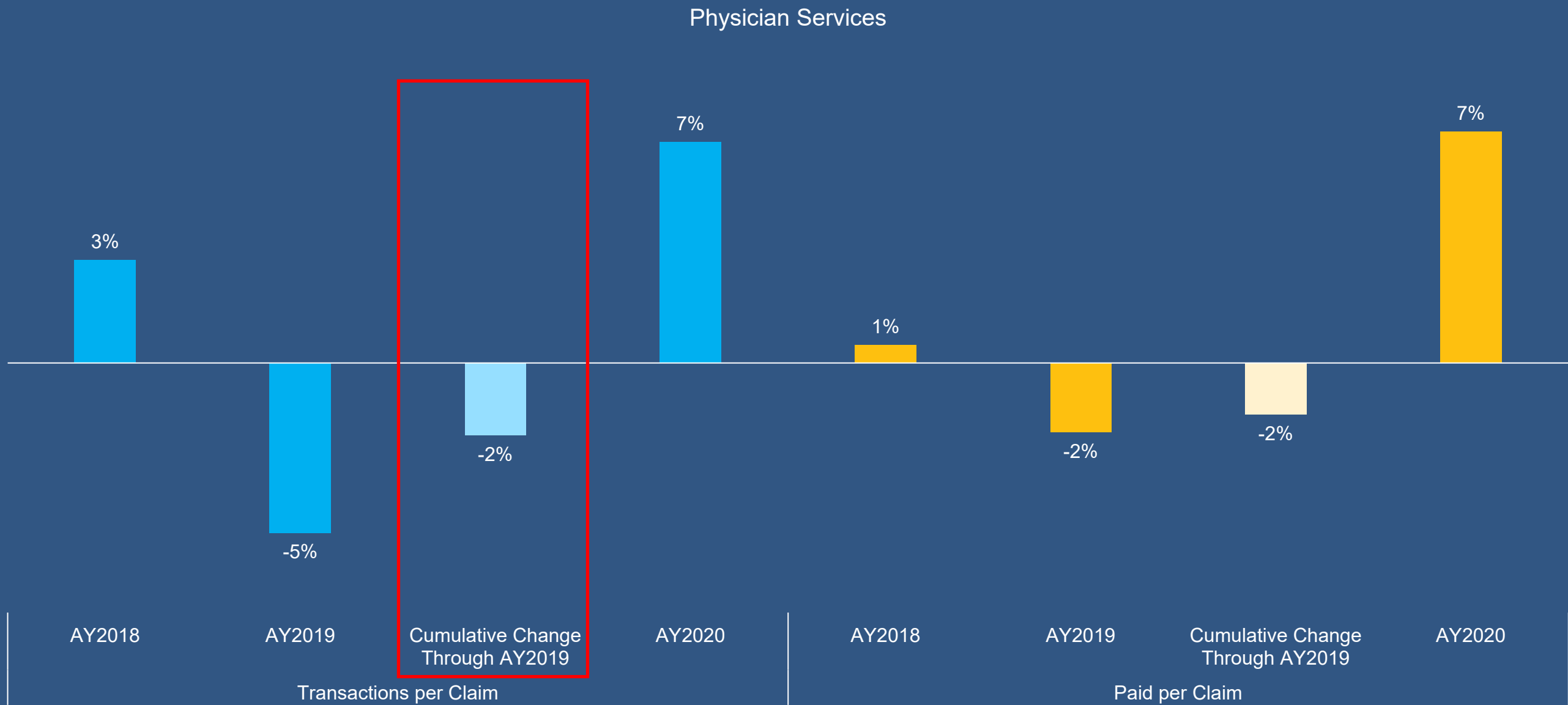
Percent Change in the Cost and Utilization of Medical Services within the First 30 Days (COVID-19 Claims Excluded)

■ Trans per Claim ■ Paid per Claim



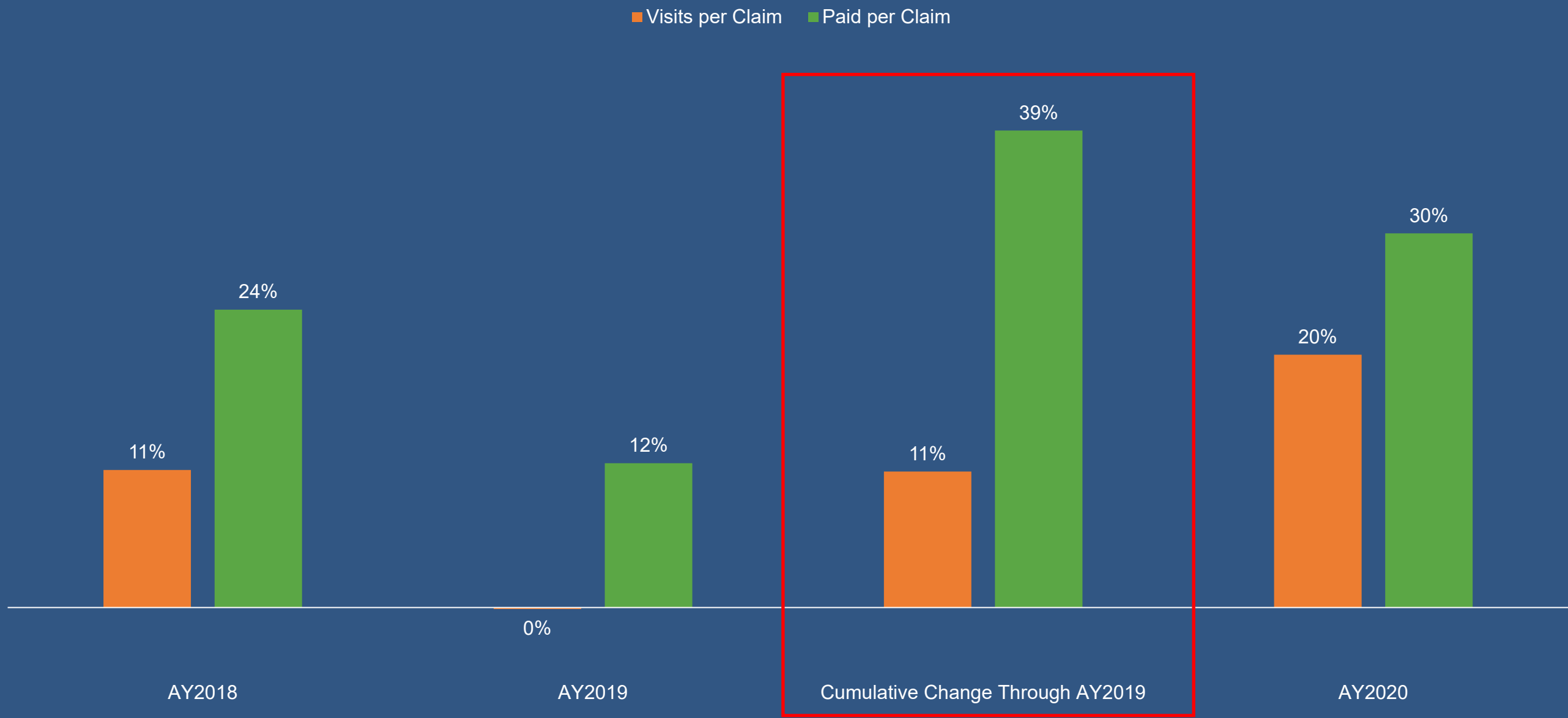
Annual Percent Change in Transactions and Payments per Claim – Physician Services (within 30 days of the accident date)

As of June 1, 2021



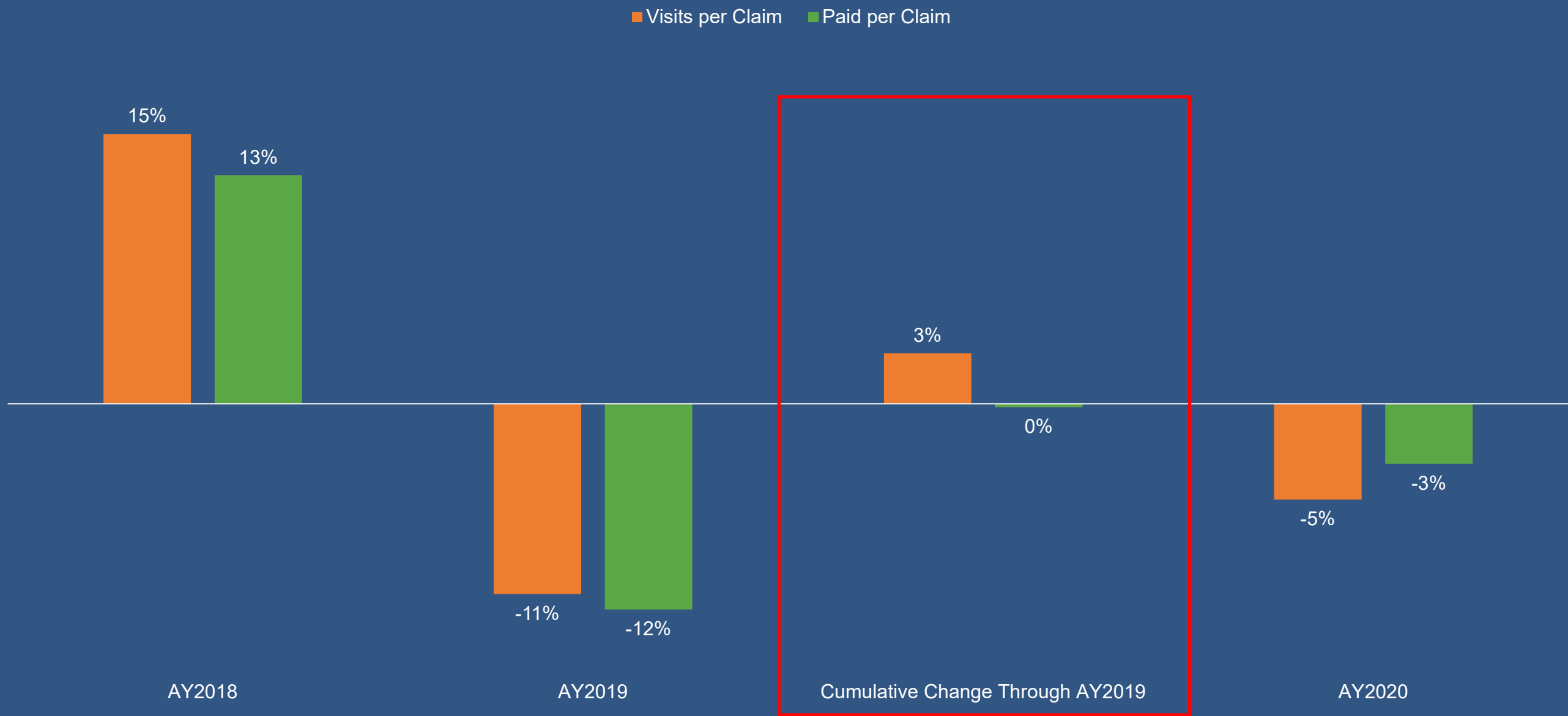
Percent Change in Physical Therapy Visits in the First 30 Days

As of June 1, 2021



Percent Change in Chiropractic Care Visits in the First 30 Days

As of June 1, 2021

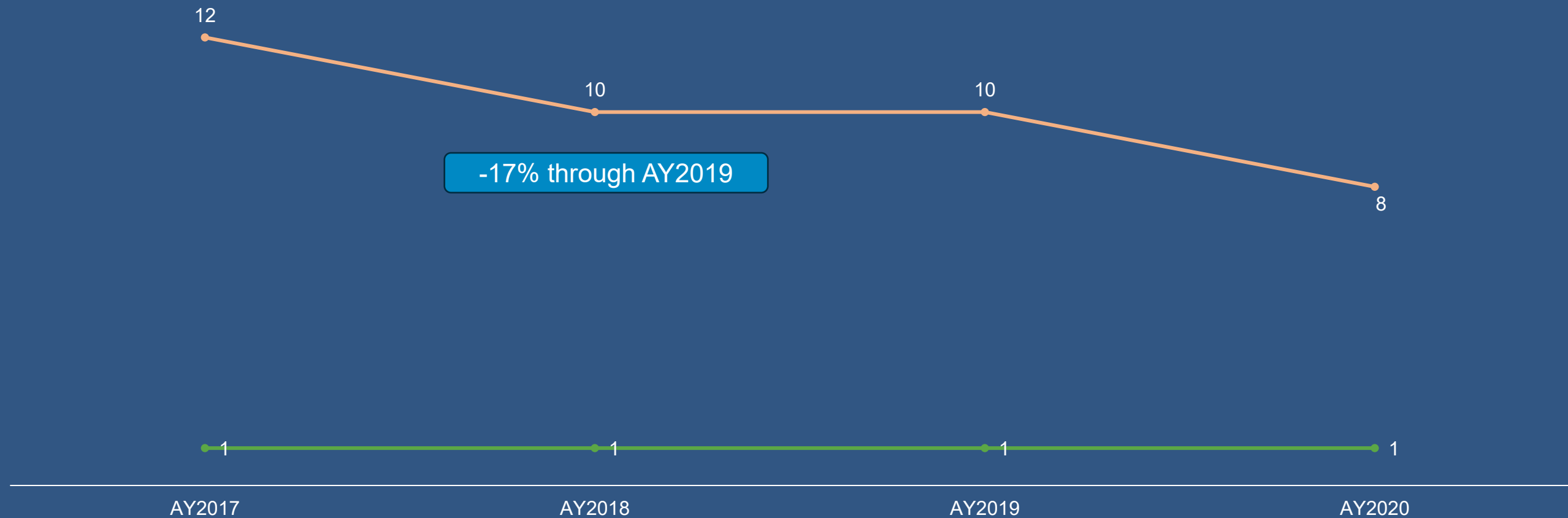


Changes in Median Time between Injury Date and Receipt of Physical Therapy (within 30 days of the accident date)

As of June 1, 2021

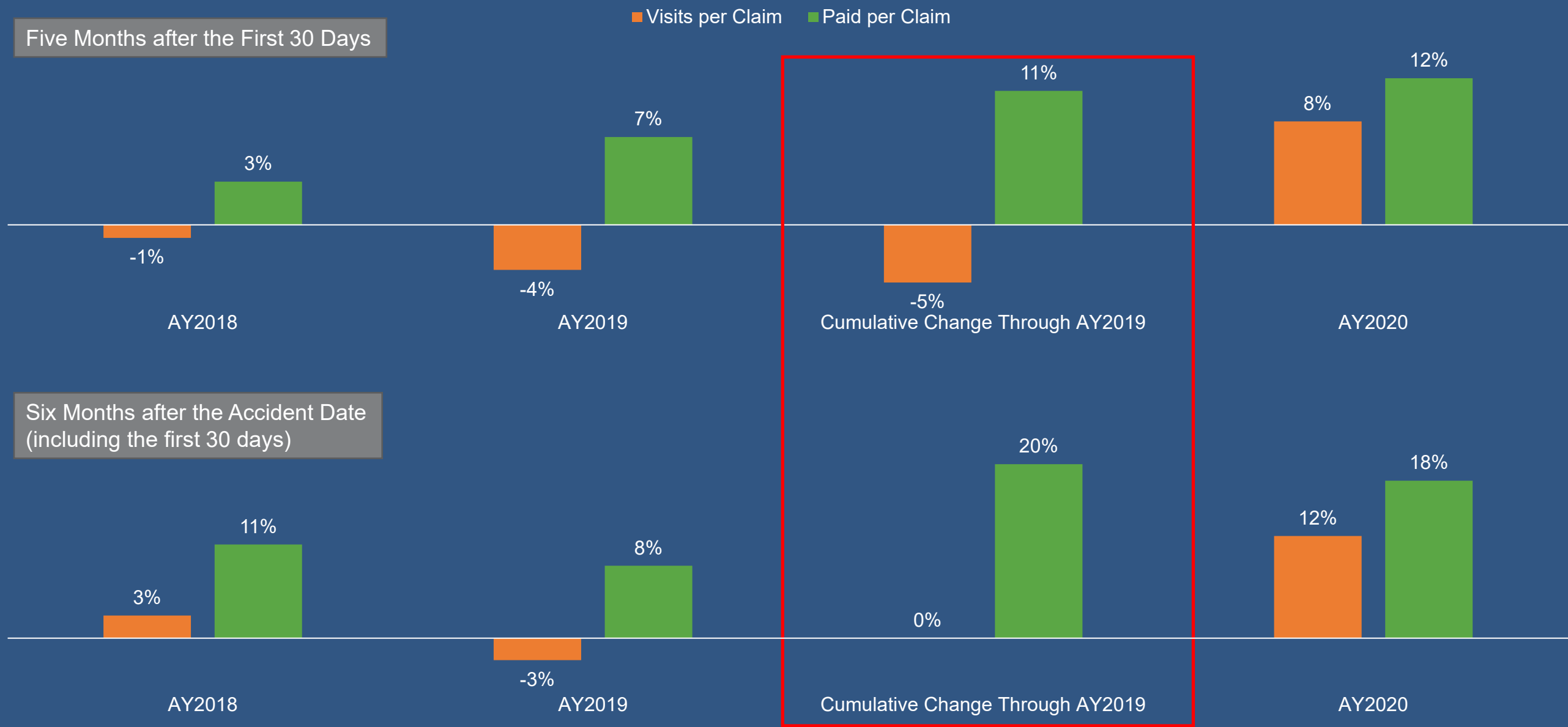
Median Time from Injury to Medical Services (Days)

First Physical Therapy First Medical Service



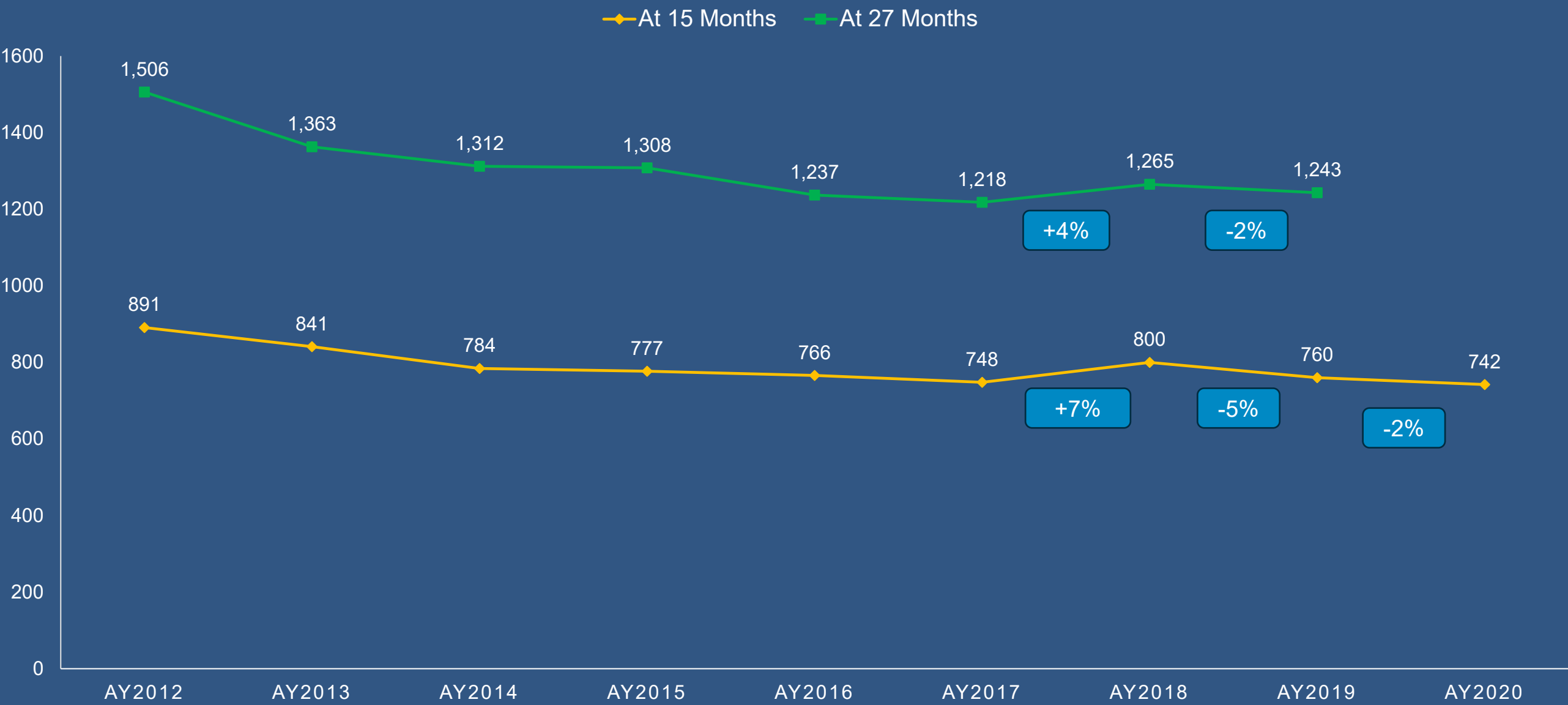
Percent Change in Physical Therapy Visits per Claim

As of June 1, 2021



Paid Medical Cost Containment Program Costs per Claim

As of March 31, 2021



Summary of Key Findings

As of June 1, 2021

- During the two years after the SB 1160 UR provisions became effective:
 - Number of physical therapy visits per claim increased in the first 30 days, while utilization of other types of medical services decreased during the same period.
 - Physical therapy services were provided earlier. The median time from injury to first physical therapy in the first 30 days decreased by 17%, from 12 days for AY2017 claims to 10 days for AY2019 claims.
 - There was less utilization of physical therapy services 5 months after the first 30 days.
- There is no indication of the SB 1160 UR provisions significantly impacting the cost of medical services through 6 months from the date of injury, and the increased medical severity is driven mostly by fee schedule updates.
- There is no indication of the UR provisions significantly impacting utilization review costs within two years of the reform implementation.

03

3/31/2021 Experience Review

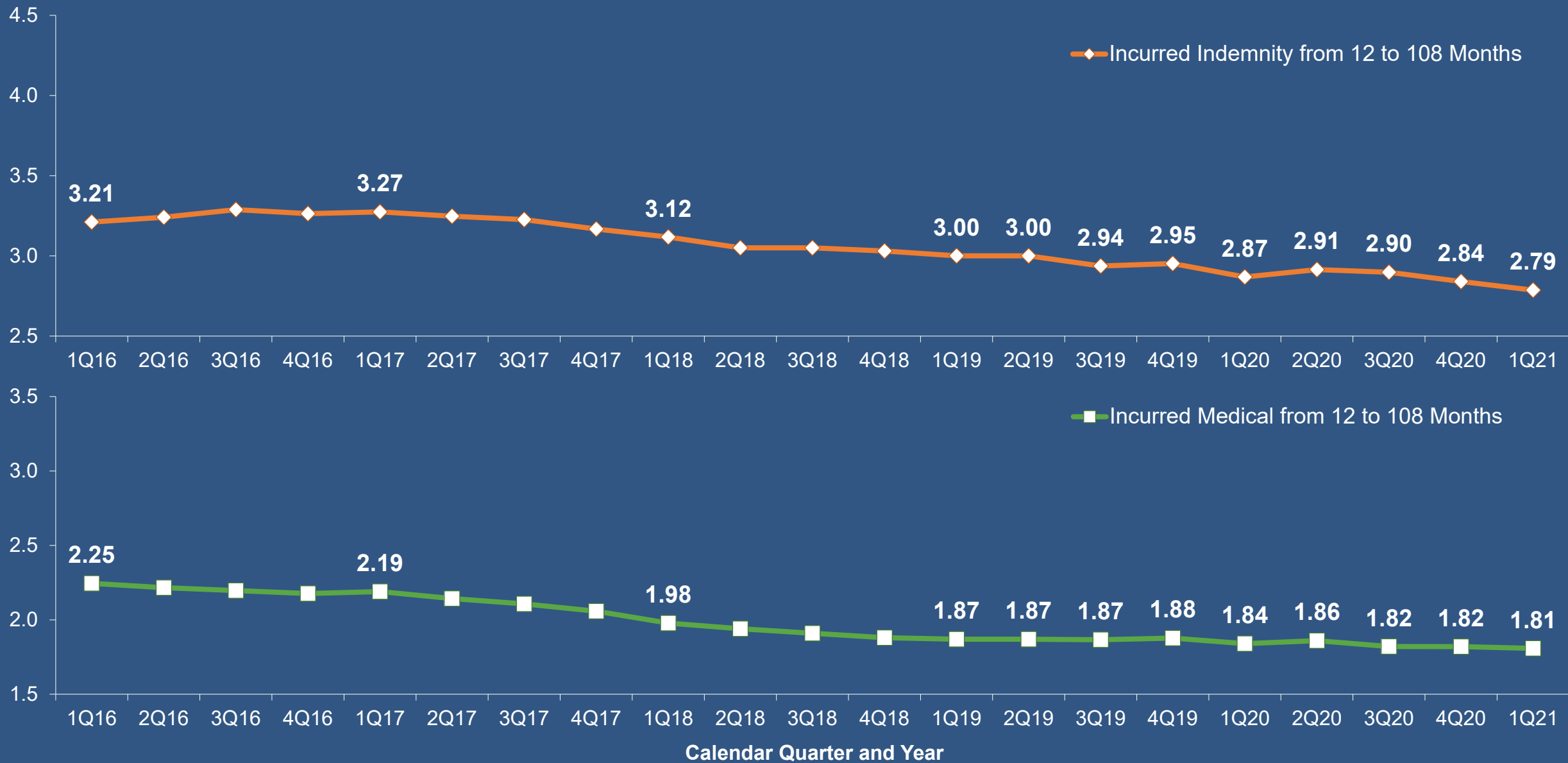


Summary of 3/31/2021 Experience (Excluding COVID-19)

- Almost 100% of market included
- Main insights:
 - Loss development generally flat
 - Claim settlement rates continuing to decline
 - 1Q 2021 non-COVID-19 claim frequency up over 1Q 2020
 - Significant number of COVID-19 claims reported in first three months of 2021
- Projection methodologies are consistent with 9/1/21 Filing
- Projected loss ratio for September 1, 2021 to August 31, 2022 policies is 0.596 (same as 9/1/21 Filing)
 - Small increase (<0.005) from updated wage forecast
 - Small decrease (<0.005) from updated 2020 frequency trend

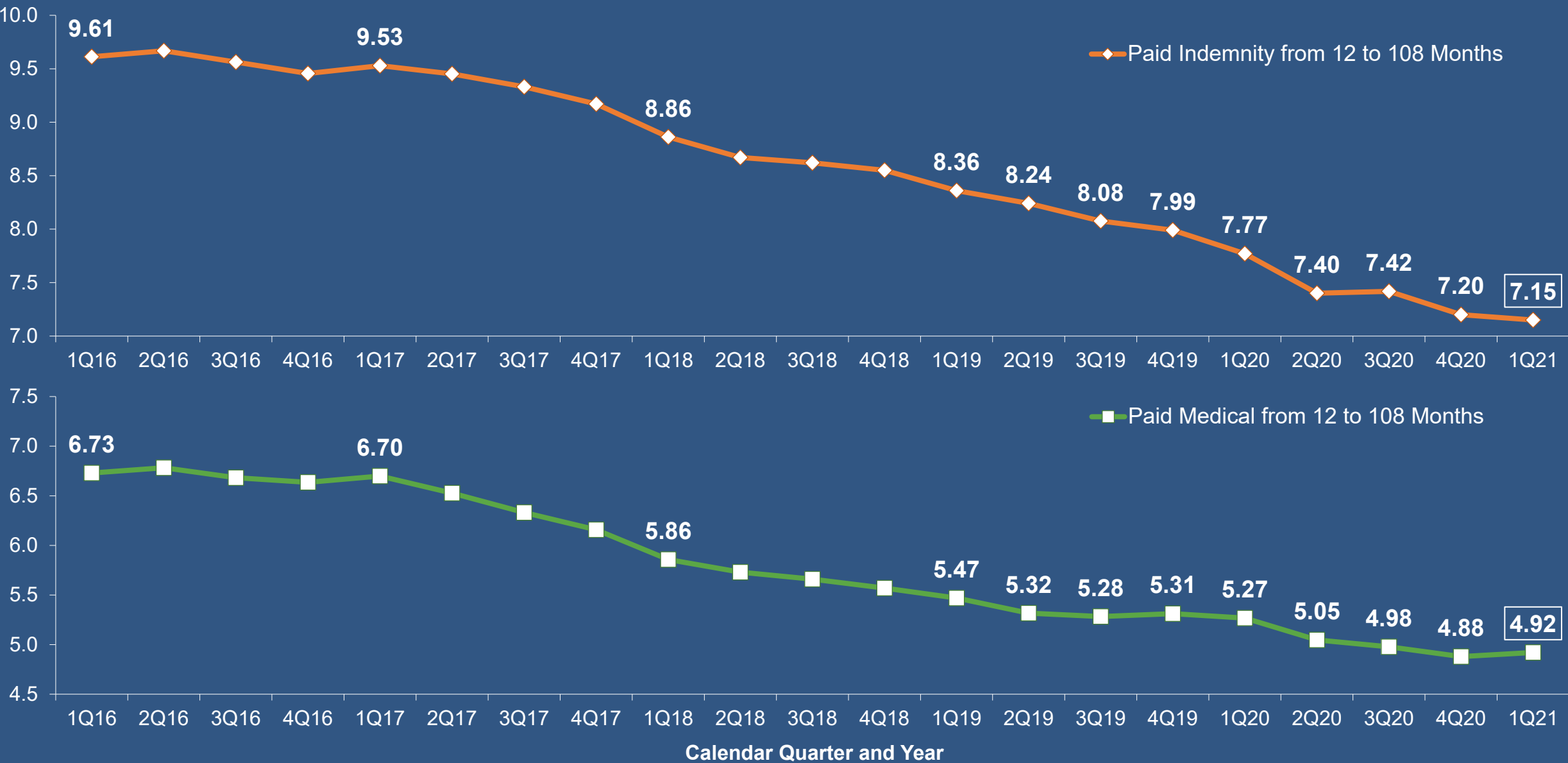
Cumulative Incurred Development from 12 to 108 Months

As of March 31, 2021



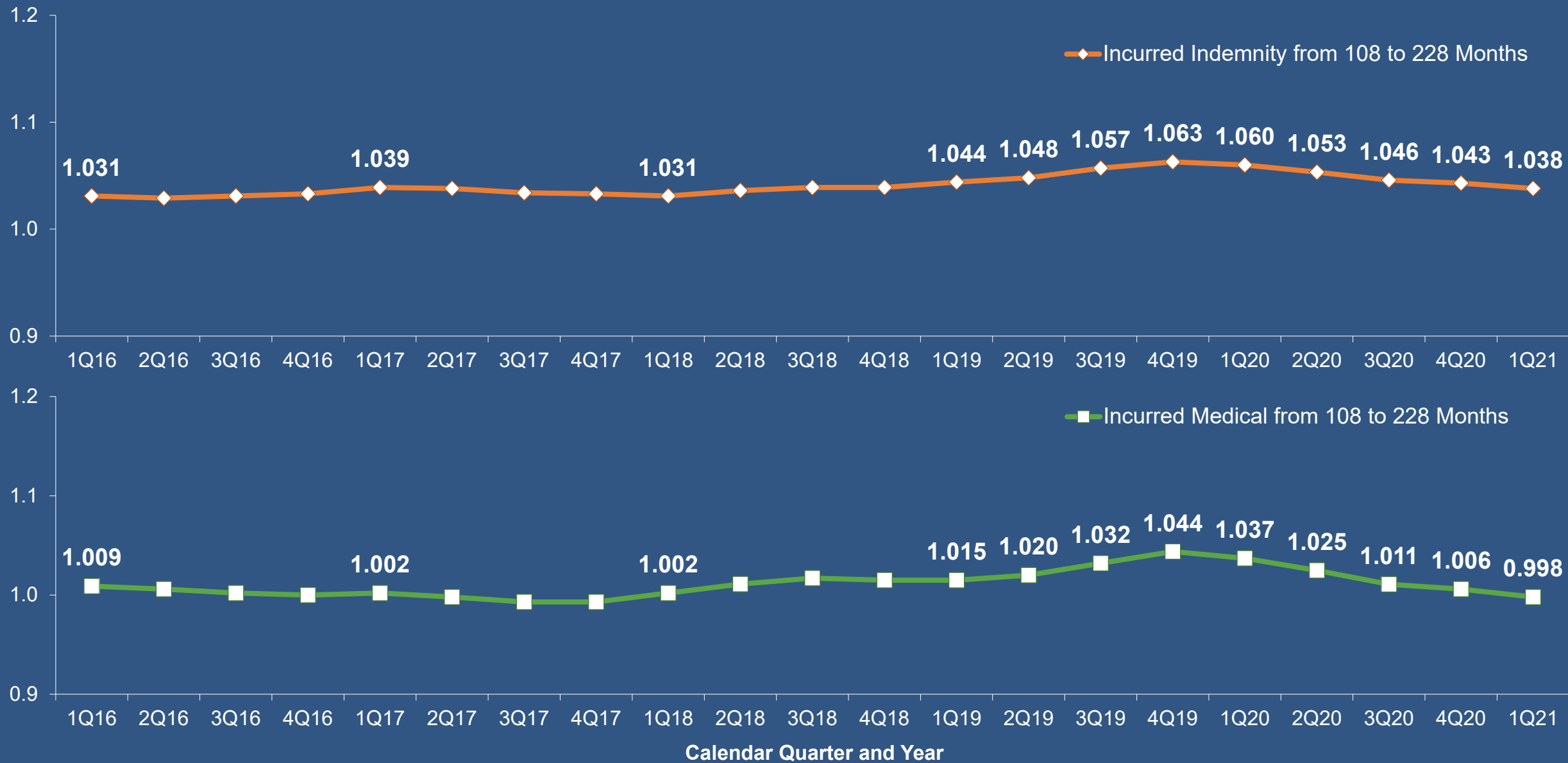
Cumulative Paid Development from 12 to 108 Months

As of March 31, 2021



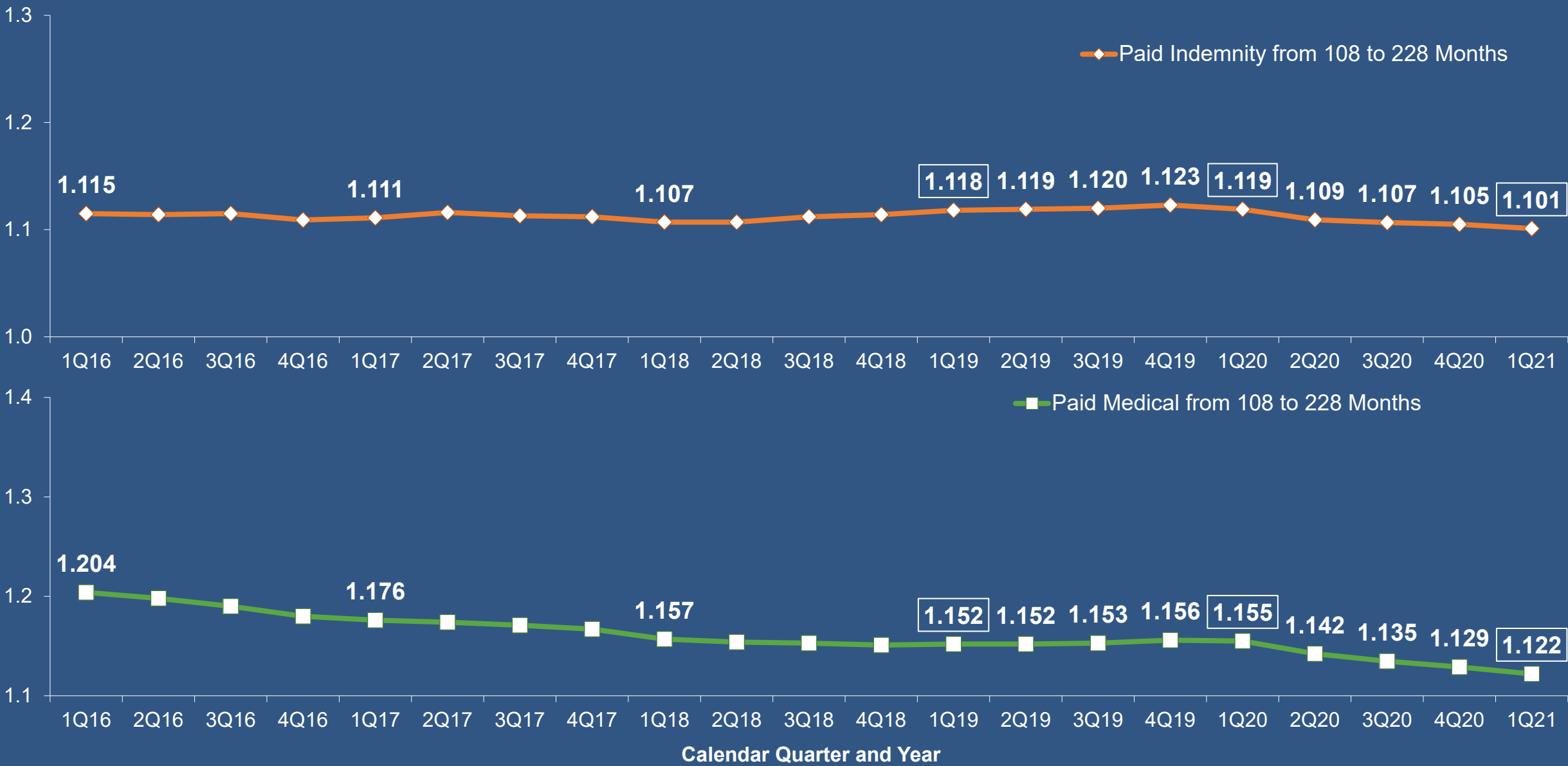
Cumulative Incurred Development from 108 to 228 Months

As of March 31, 2021



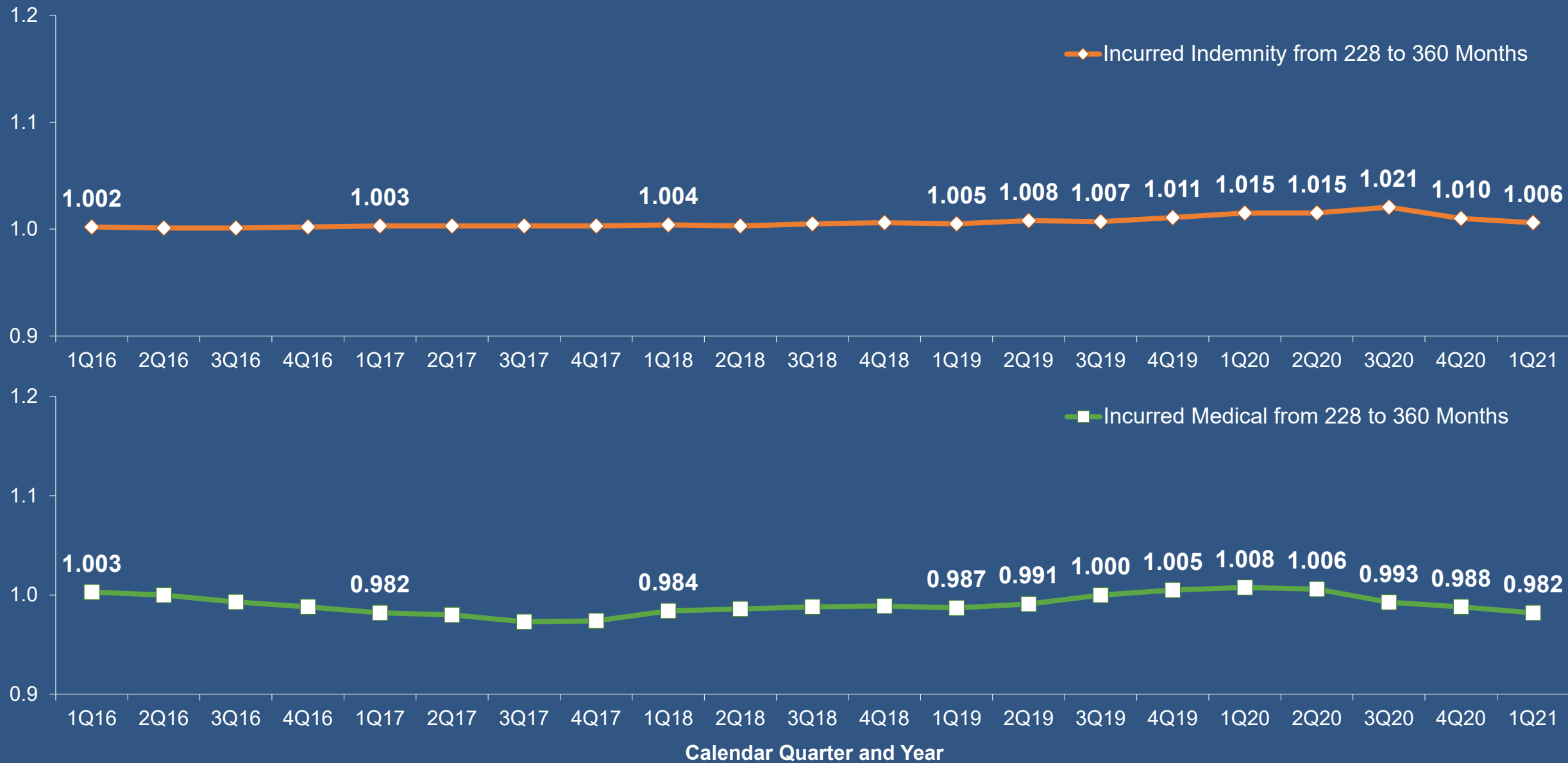
Cumulative Paid Development from 108 to 228 Months

As of March 31, 2021



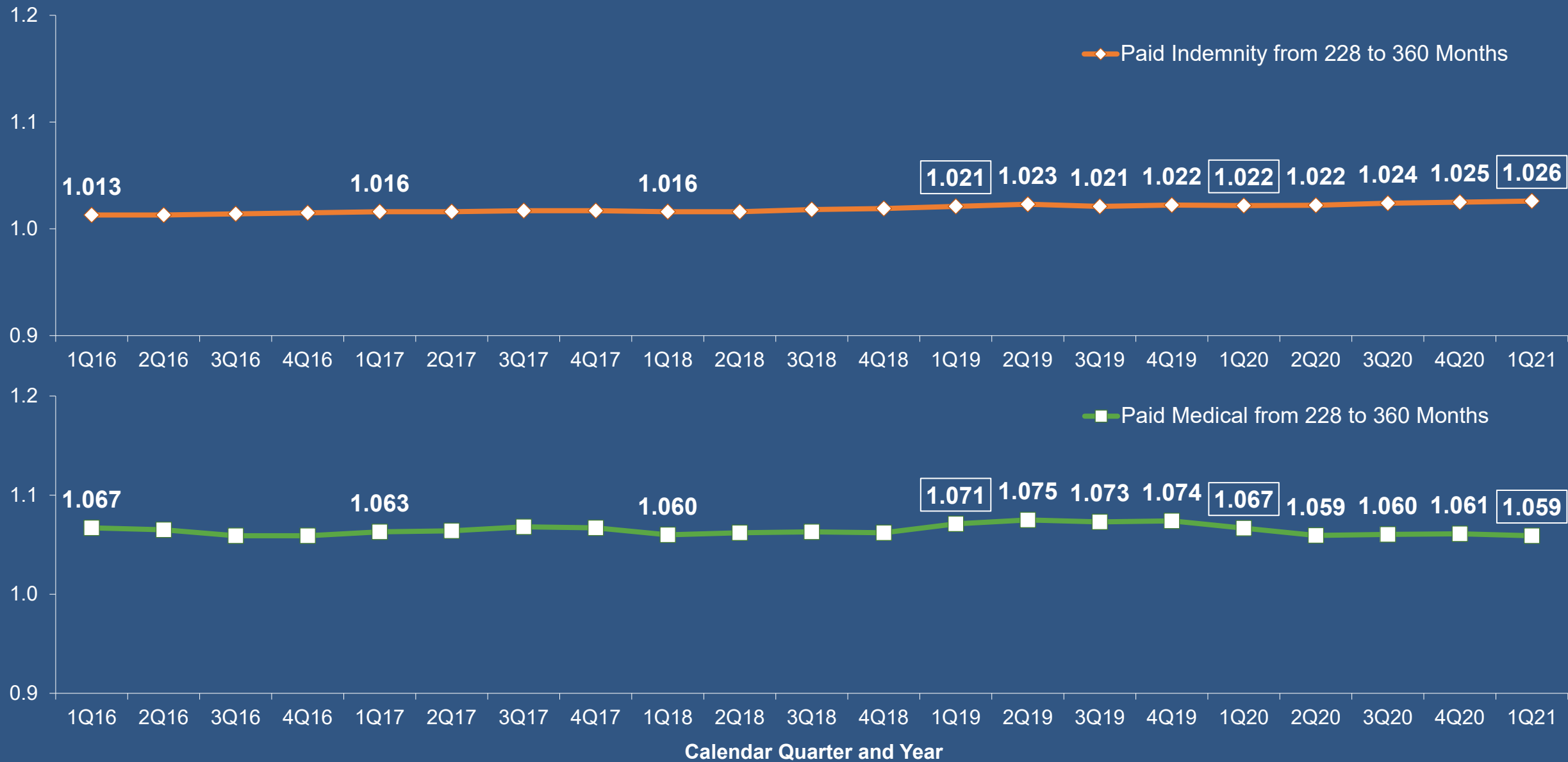
Cumulative Incurred Development from 228 to 360 Months

As of March 31, 2021



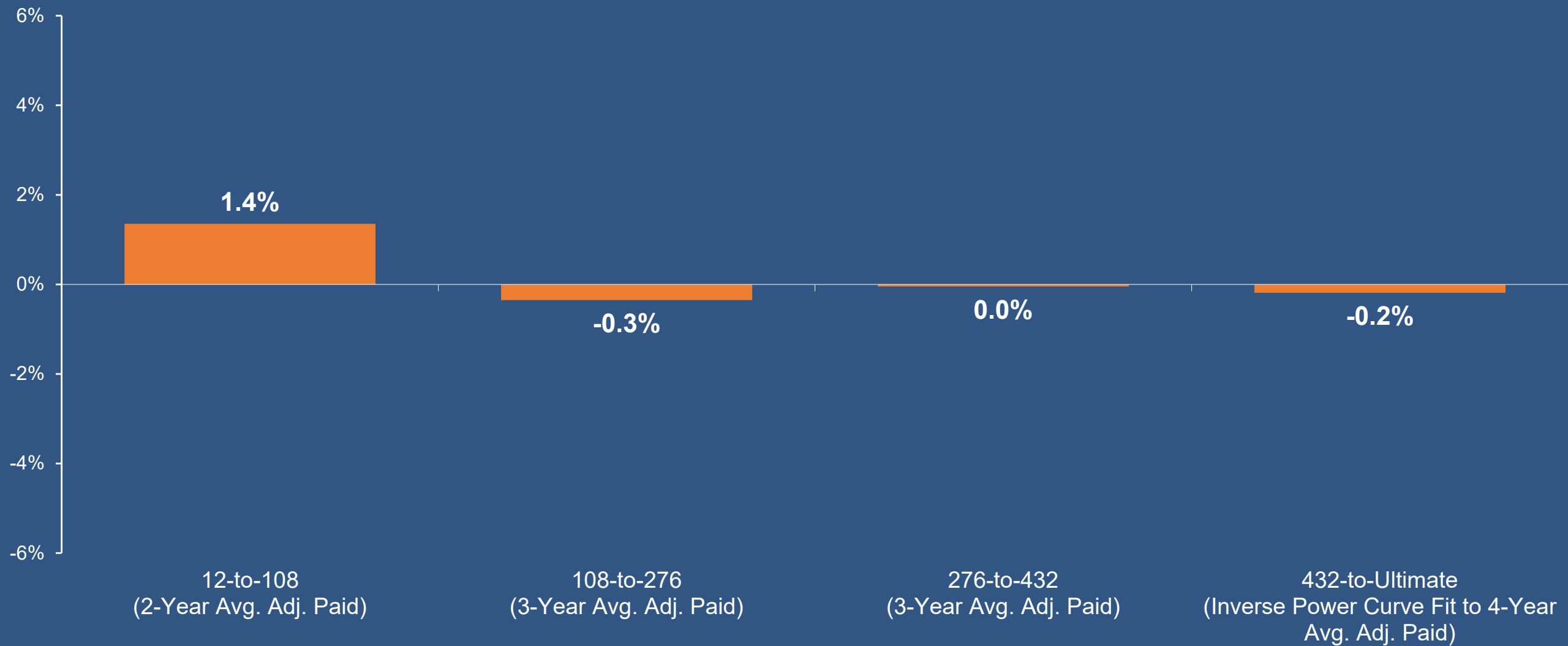
Cumulative Paid Development from 228 to 360 Months

As of March 31, 2021



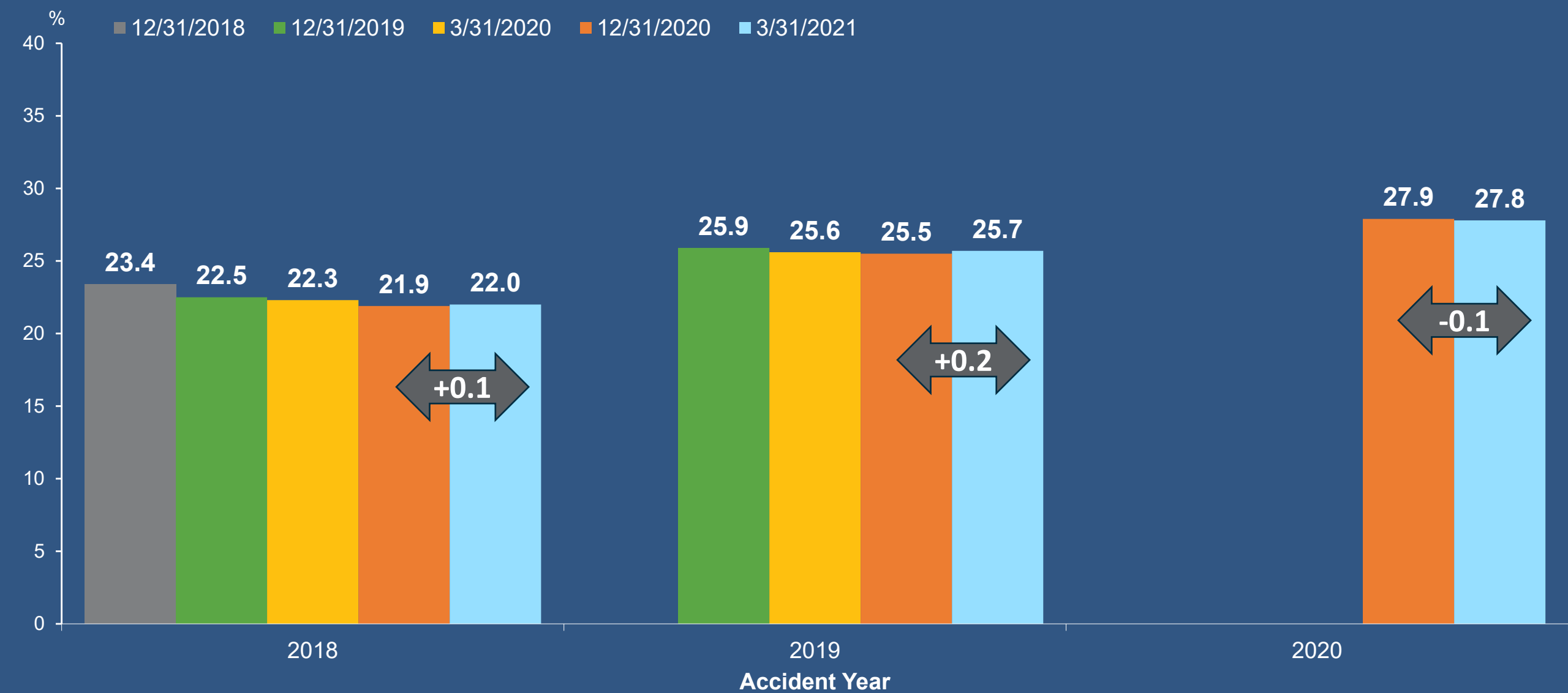
Change in Projected Medical Development Factor

12/31/2020 to 3/31/2021 Experience



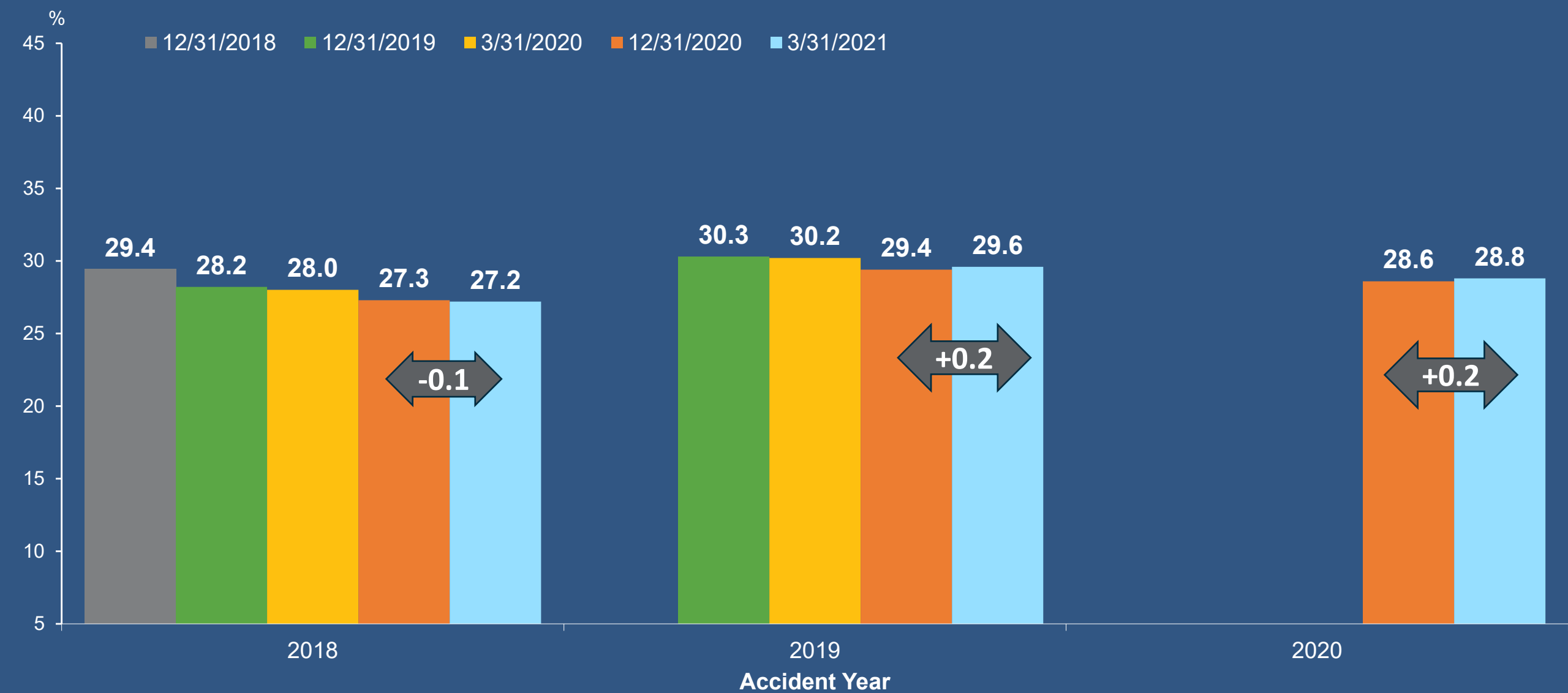
Developed Indemnity Loss Ratios (Exhibit 3.1)

As of March 31, 2021



Developed Medical Loss Ratios (Exhibit 3.2)

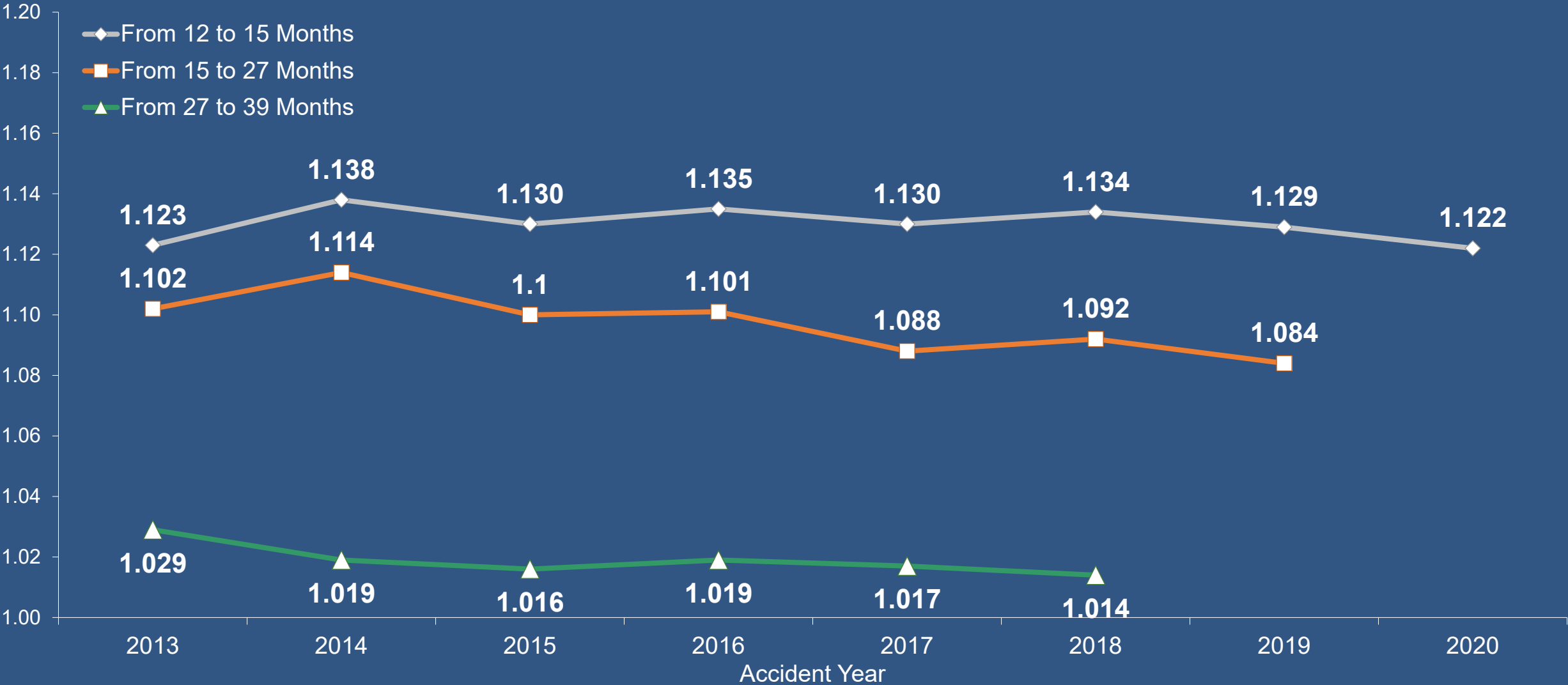
As of March 31, 2021



Note: All loss ratios are adjusted to the loss development methodology reflected in the June 22, 2021 Actuarial Committee Agenda and may not be comparable to the actual loss ratios projected at that time.
Source: WCIRB Aggregate Financial Data excluding COVID-19 claims

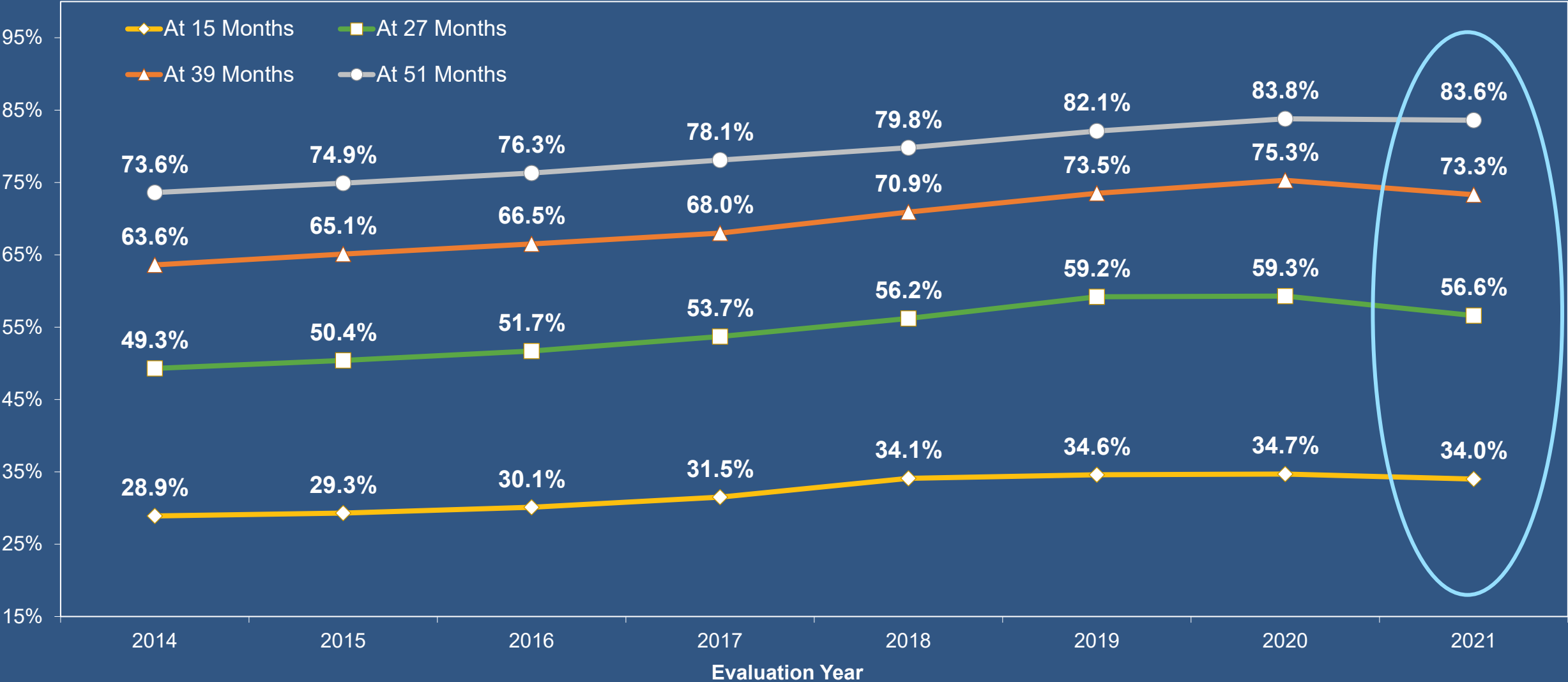
Indemnity Claim Count Development (Exhibits 10.1 and 10.2)

As of March 31, 2021



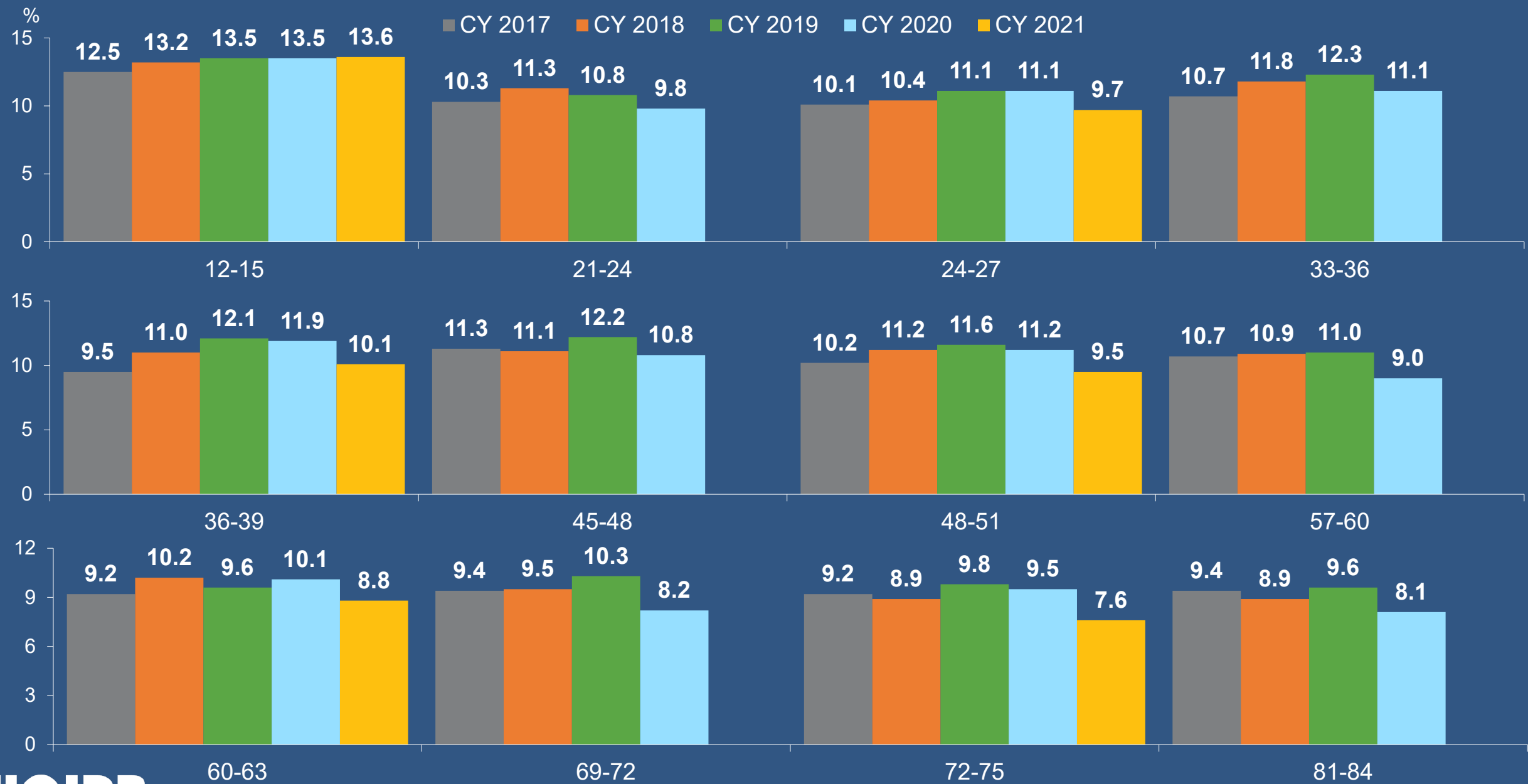
Estimated Ultimate Indemnity Claim Settlement Ratios (Exhibit 11.2)

As of March 31, 2021



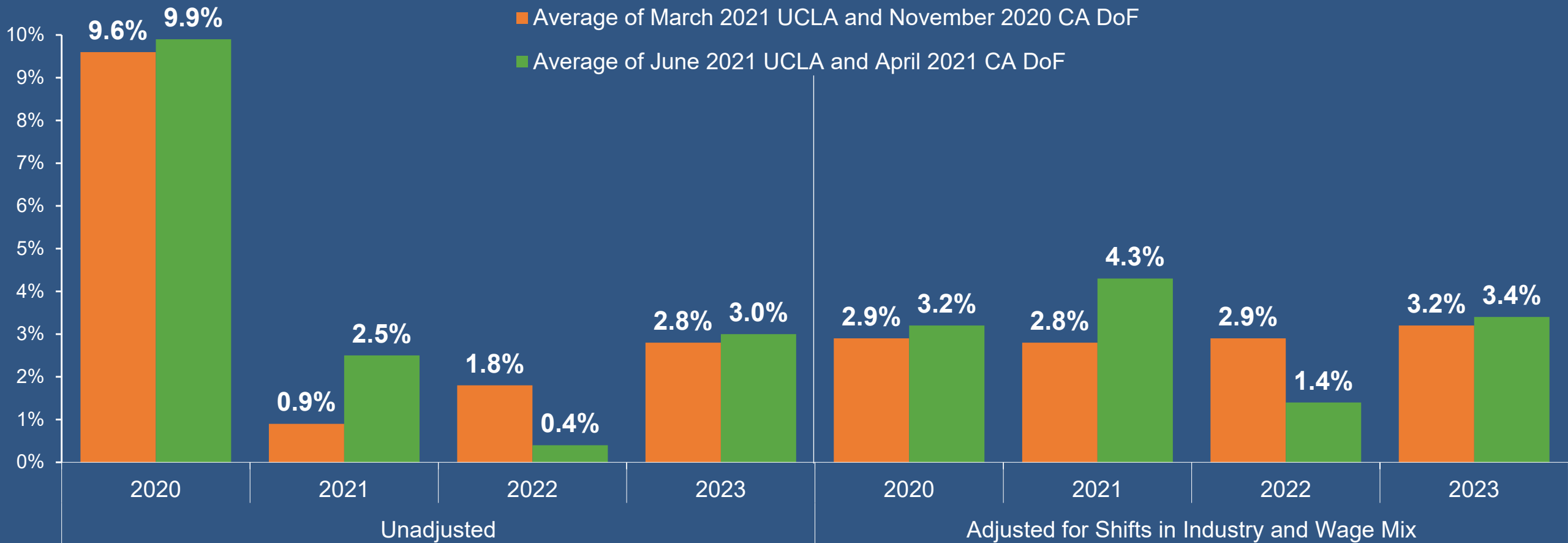
Incremental Closed Indemnity Claims Compared to Estimated Prior Open Claims

As of March 31, 2021



Average Annual Wage Level Change Forecast (Exhibit 5.1)

As of June 2021



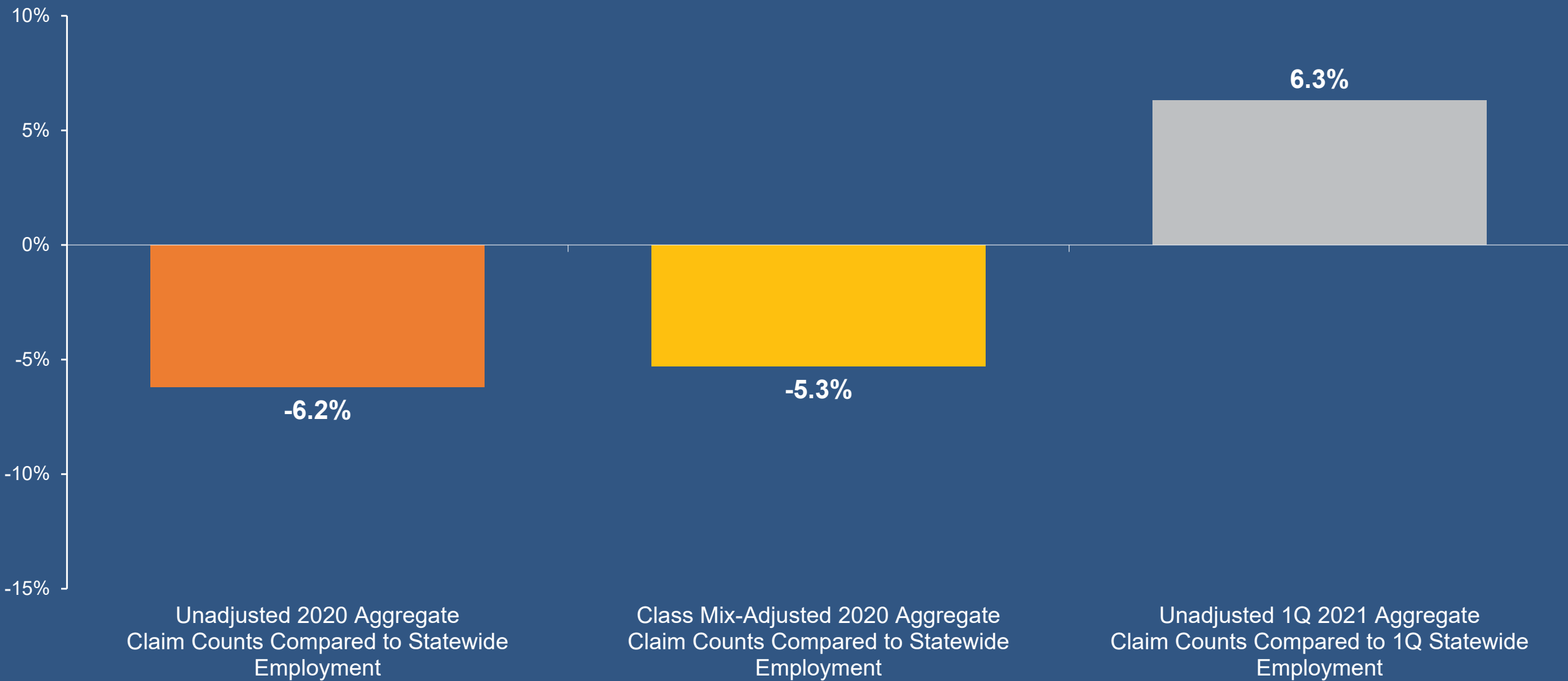
Average Annual Wage Change Projection from 2019:

9/1/2021 Filing: 2.9%

6/22/2021 Agenda: 3.0%

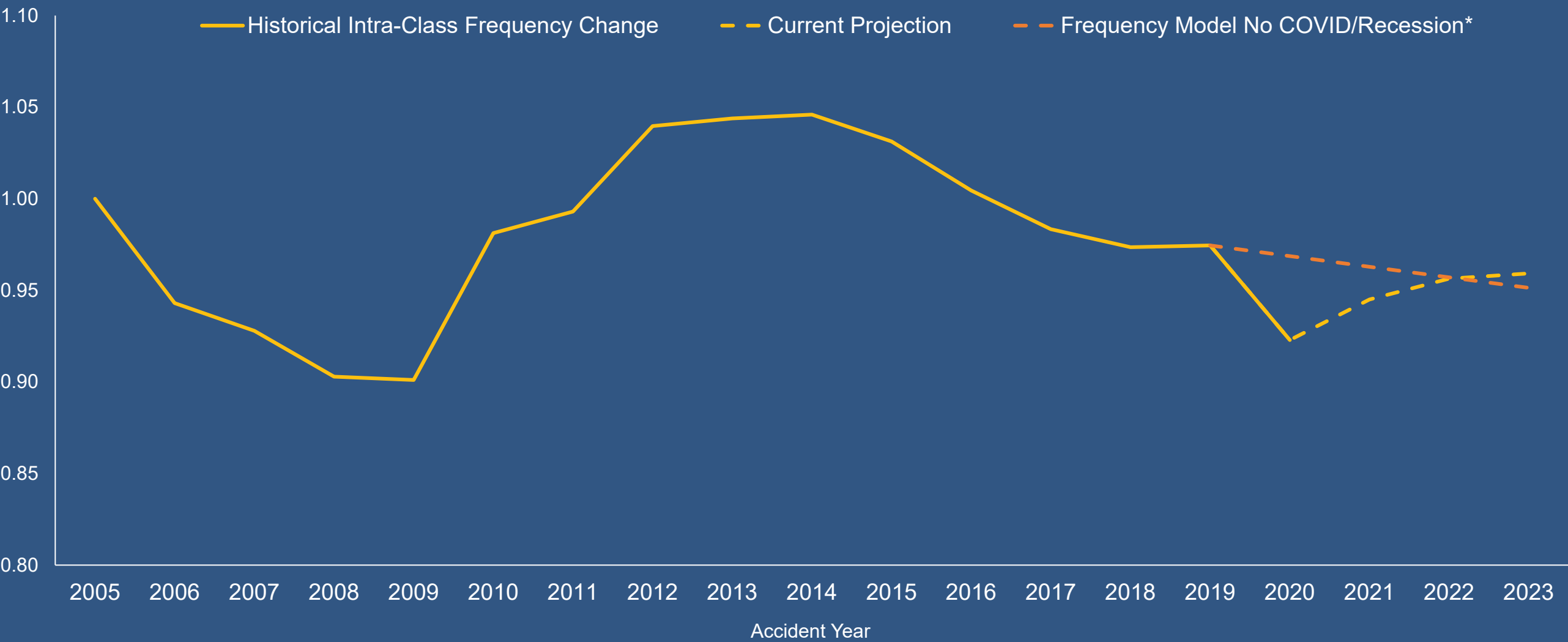
Preliminary Accident Year 2020 and 2021 Indemnity Claim Frequency Changes (Ex-COVID-19)

As of March 31, 2021



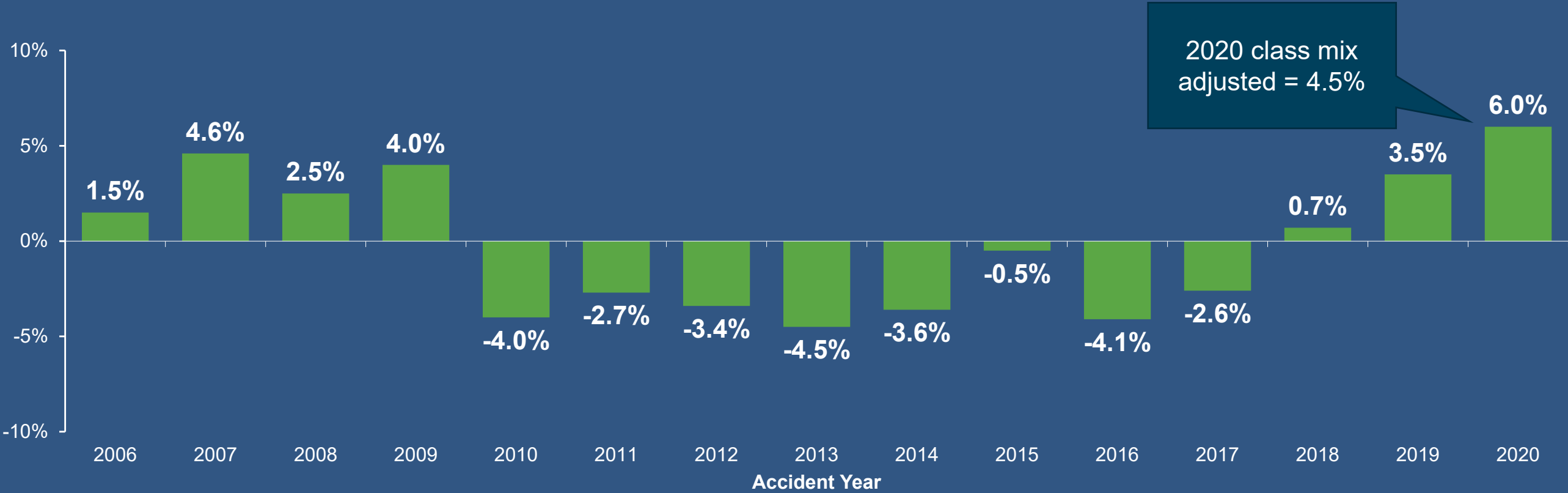
Indemnity Claim Frequency Indexed to 2005

As of March 31, 2021



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

As of March 31, 2021



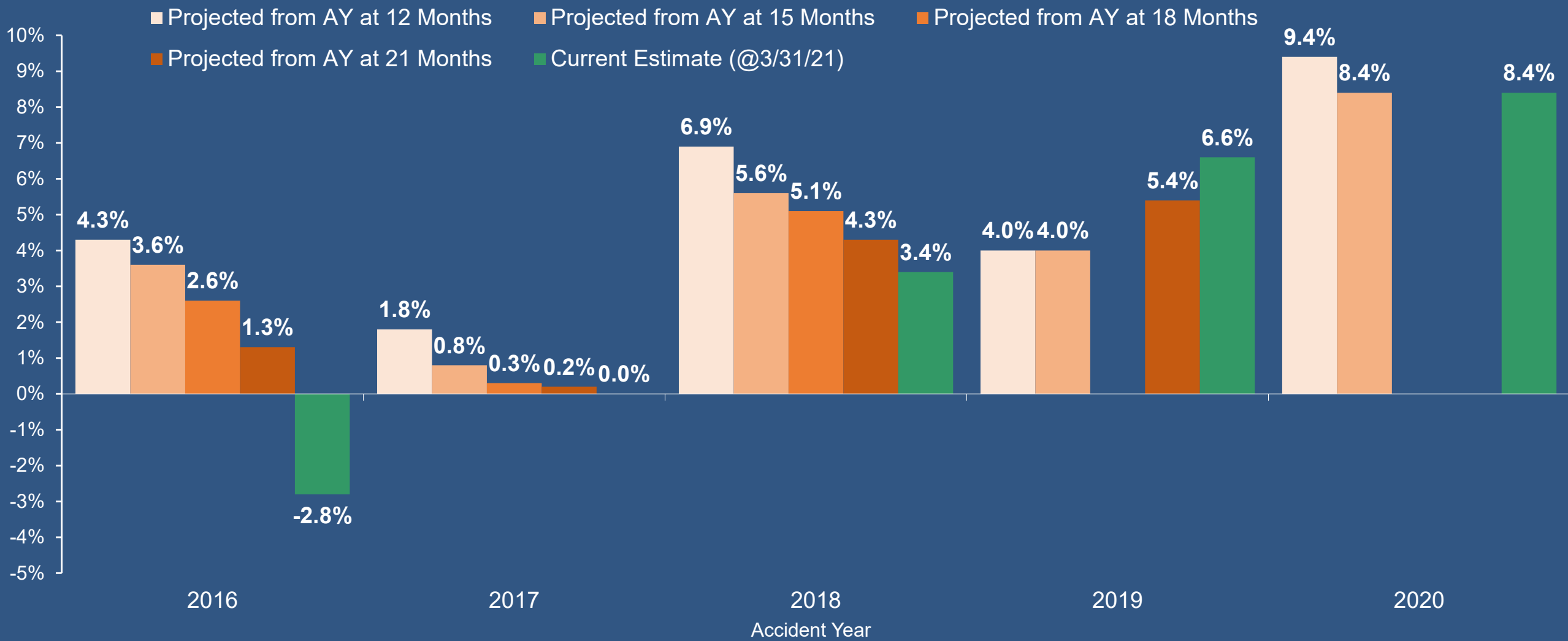
Annual Exponential Trend Based on:

- 1990 to 2020: 1.1%
- 2005 to 2019: -1.5%
- 2015 to 2019: -0.7%

9/1/2021 Filing Selected: 1.0%

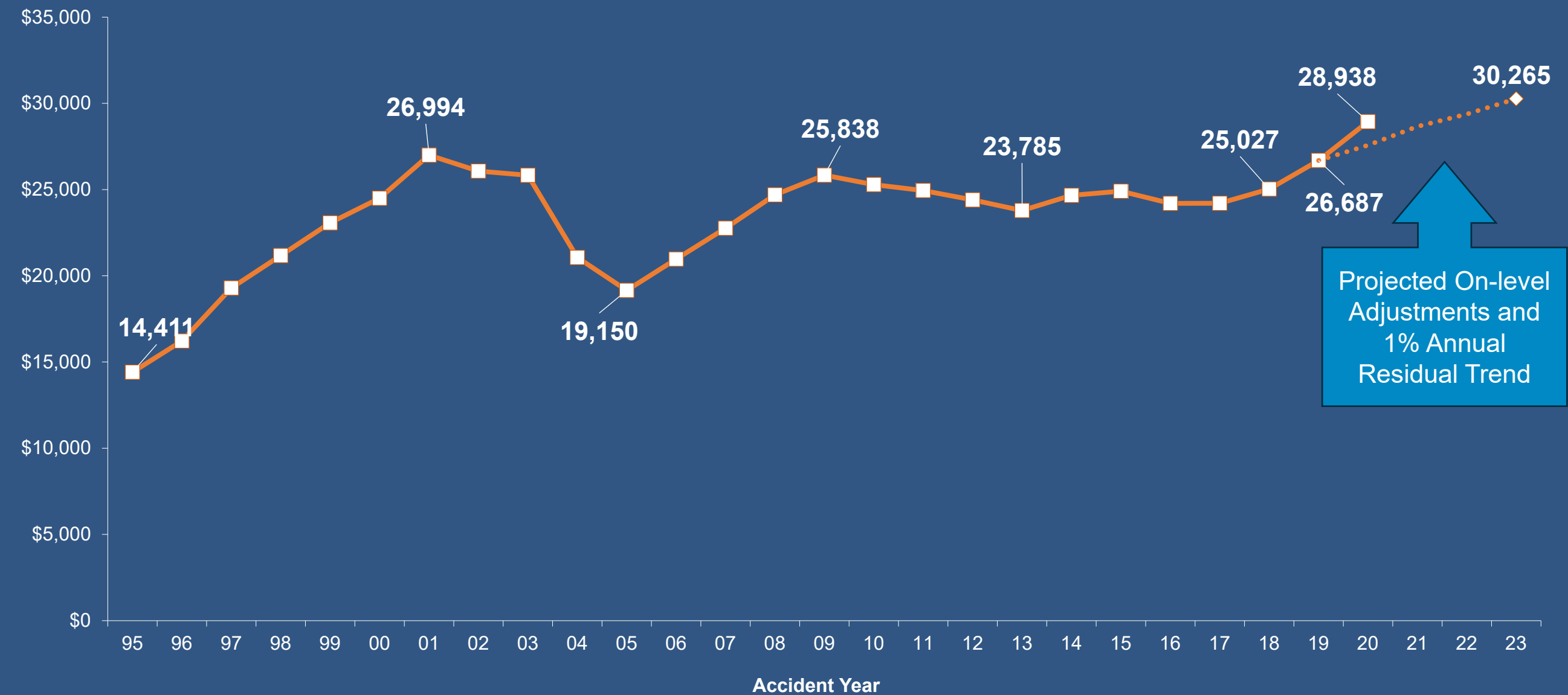
Indemnity Severity Changes Projected from Early Evaluations Compared to Current

As of March 31, 2021



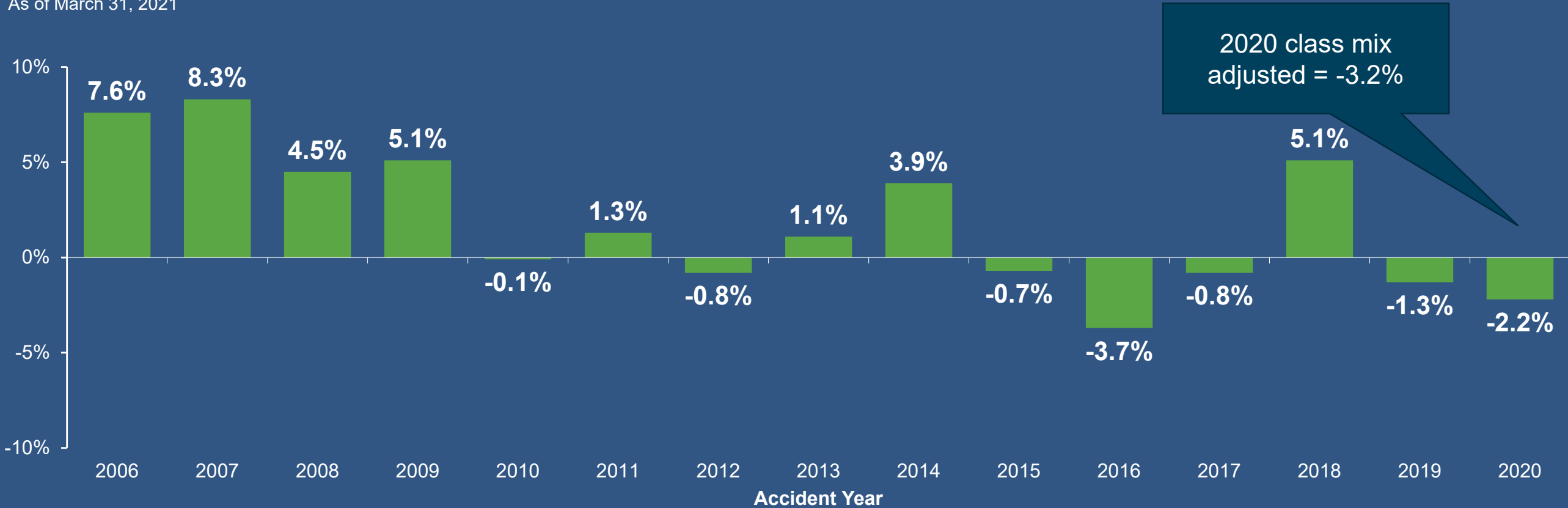
Ultimate Indemnity per Indemnity Claim

As of March 31, 2021



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

As of March 31, 2021



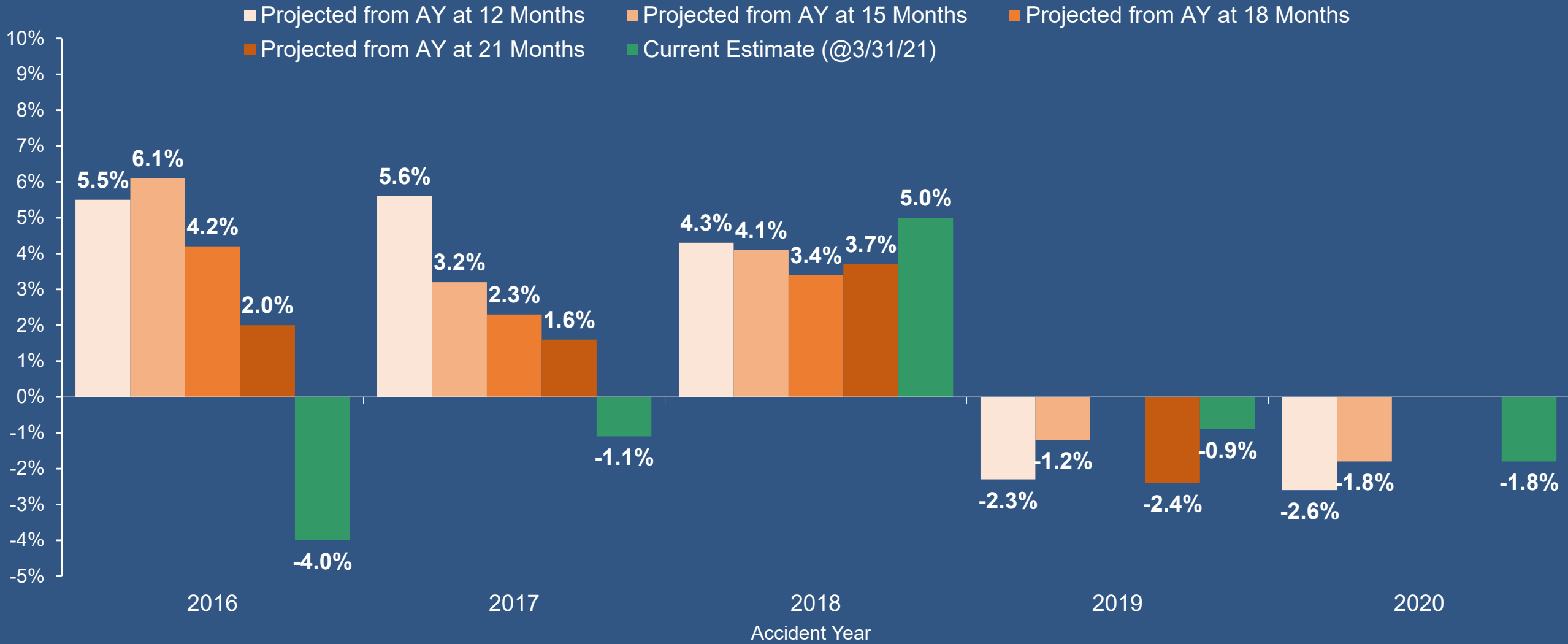
Annual Exponential Trend Based on:

- 1990 to 2020 (including MCCP): 5.2%
- 2005 to 2019: 1.5%
- 2015 to 2019: 0.2%

9/1/2021 Agenda Selected: 1.0%

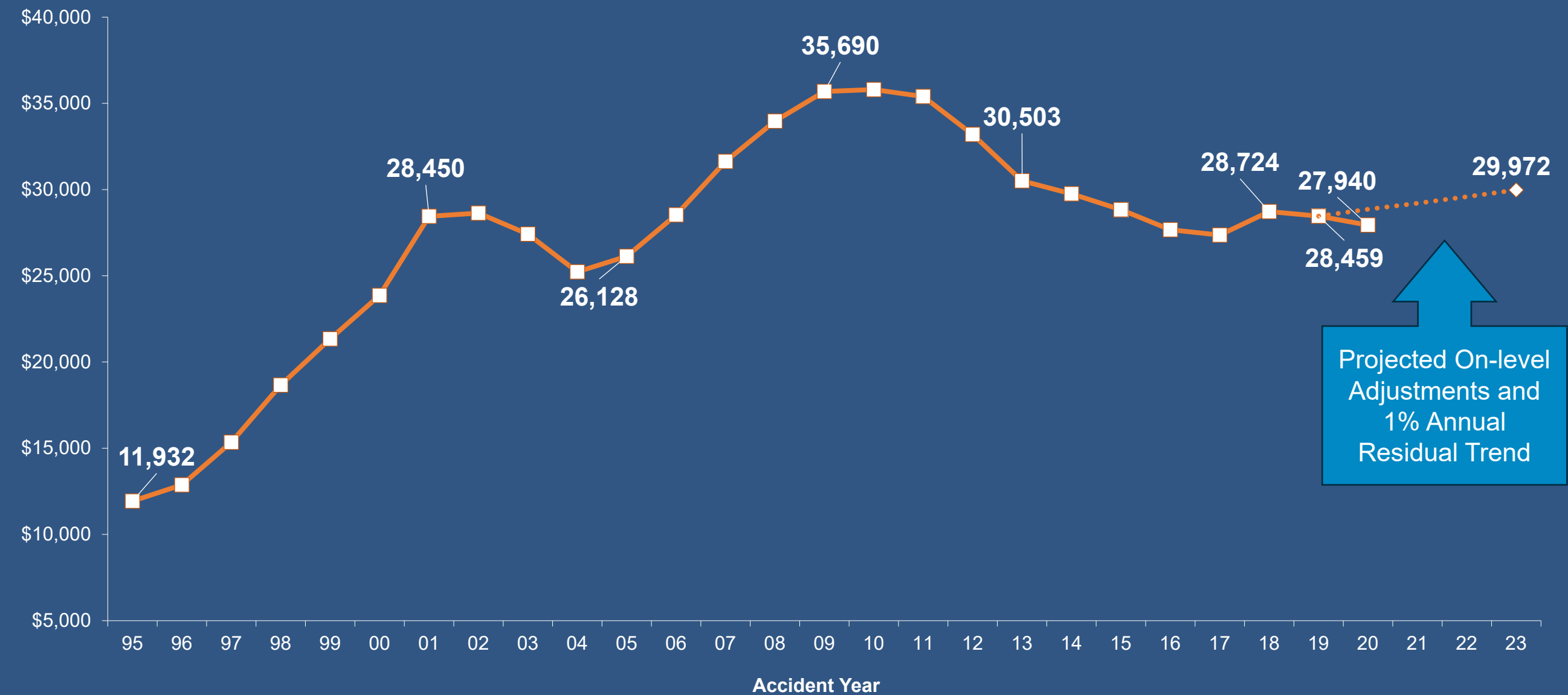
Medical Severity Changes Projected from Early Evaluations Compared to Current

As of March 31, 2021



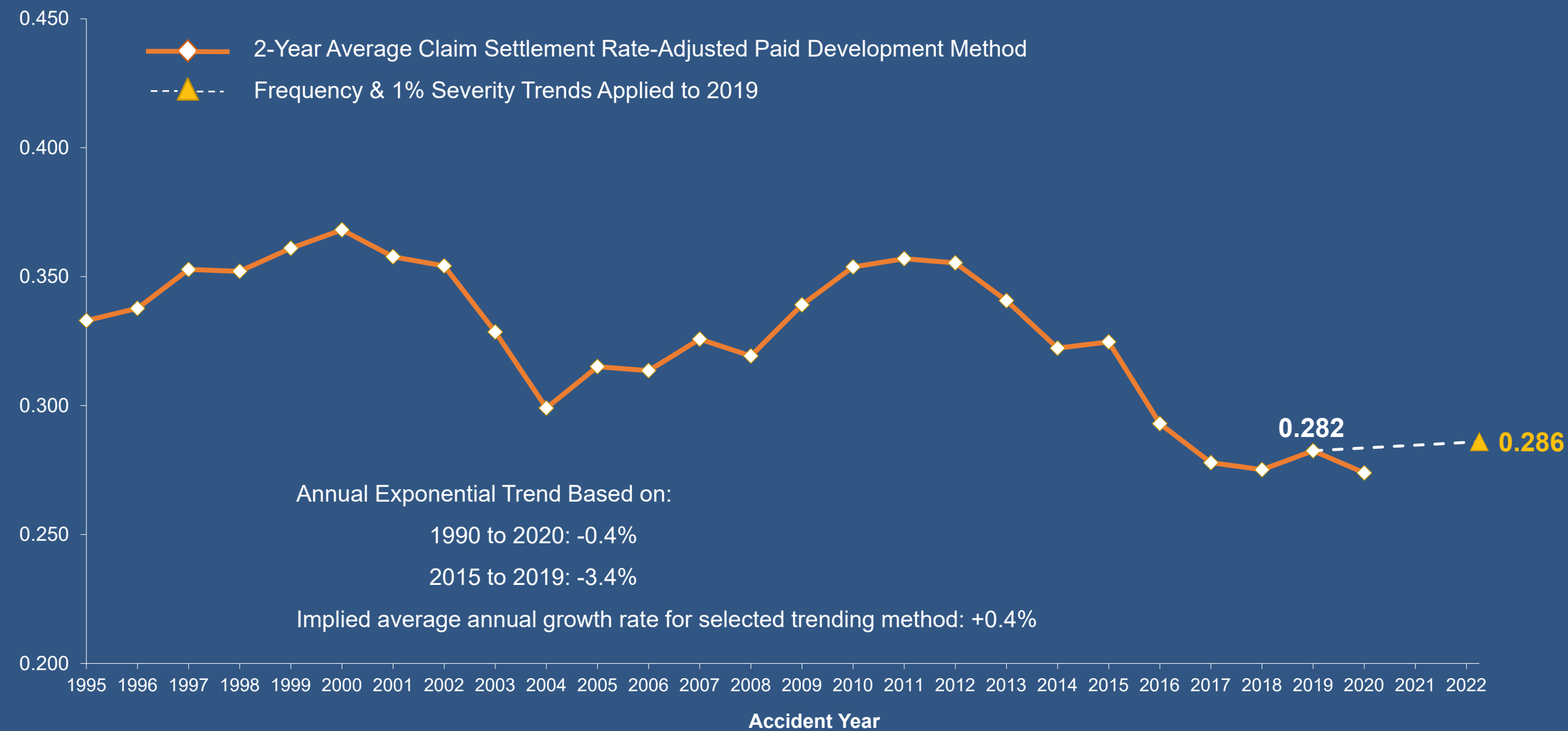
Ultimate Medical per Indemnity Claim

As of March 31, 2021



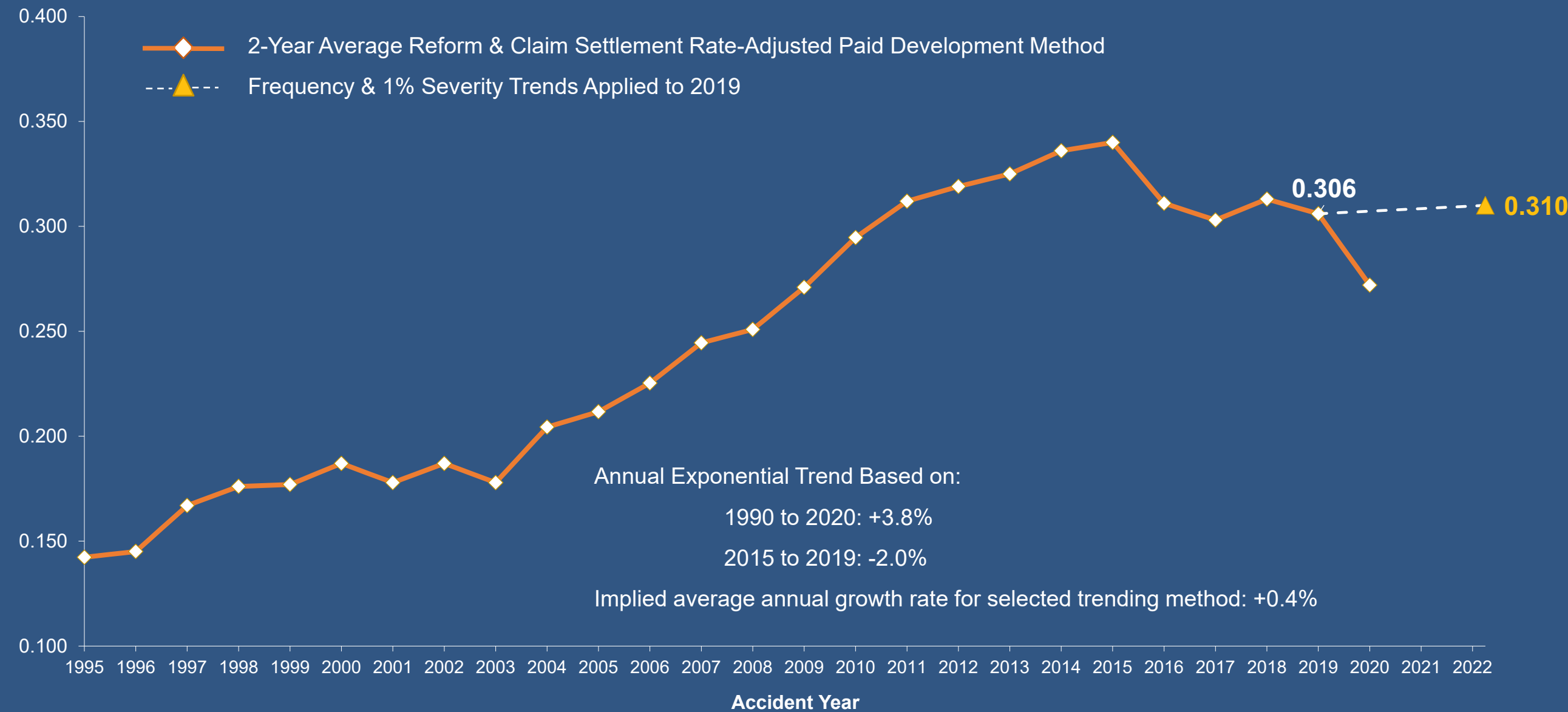
Projected On-Level Indemnity Loss Ratios (Exhibit 7.1)

As of March 31, 2021



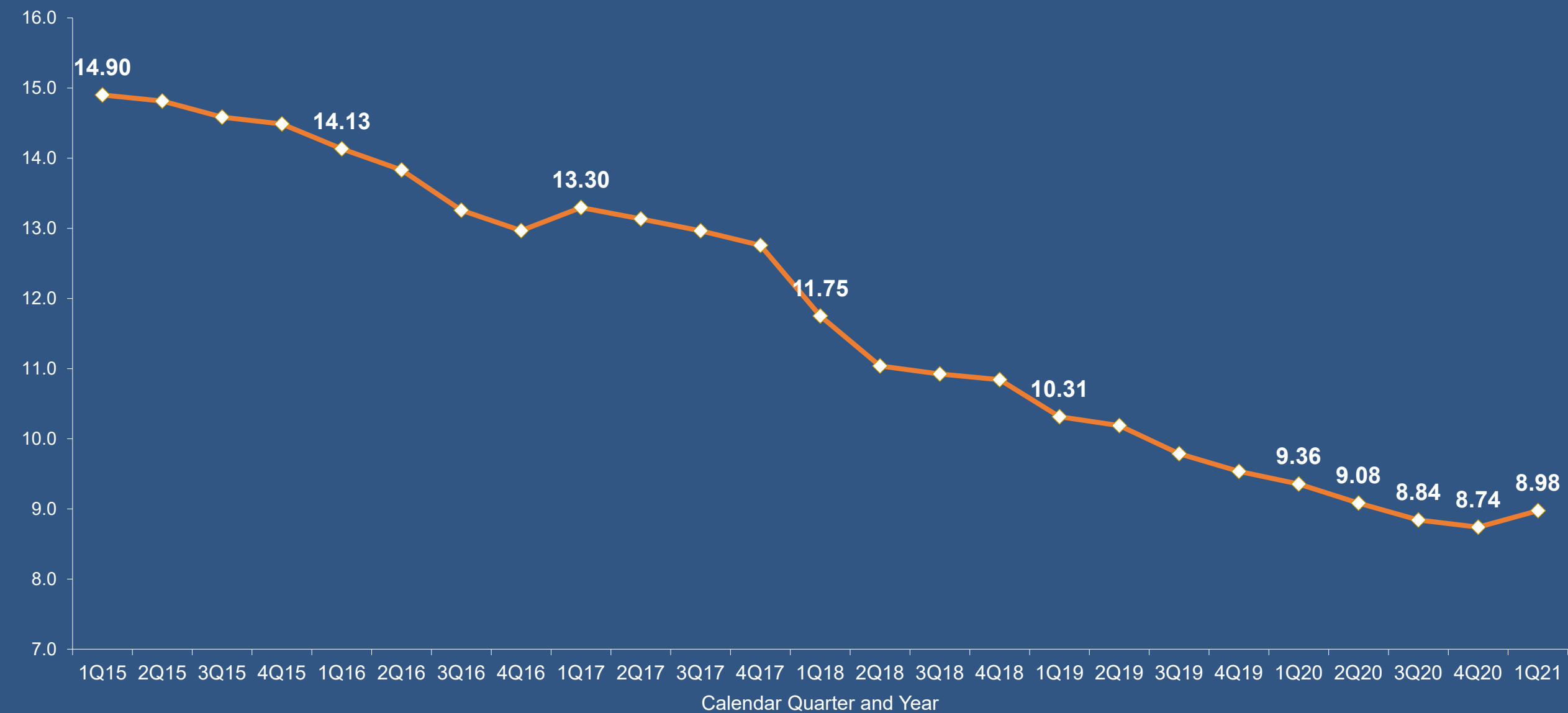
Projected On-Level Medical Loss Ratios (Exhibit 7.3)

As of March 31, 2021



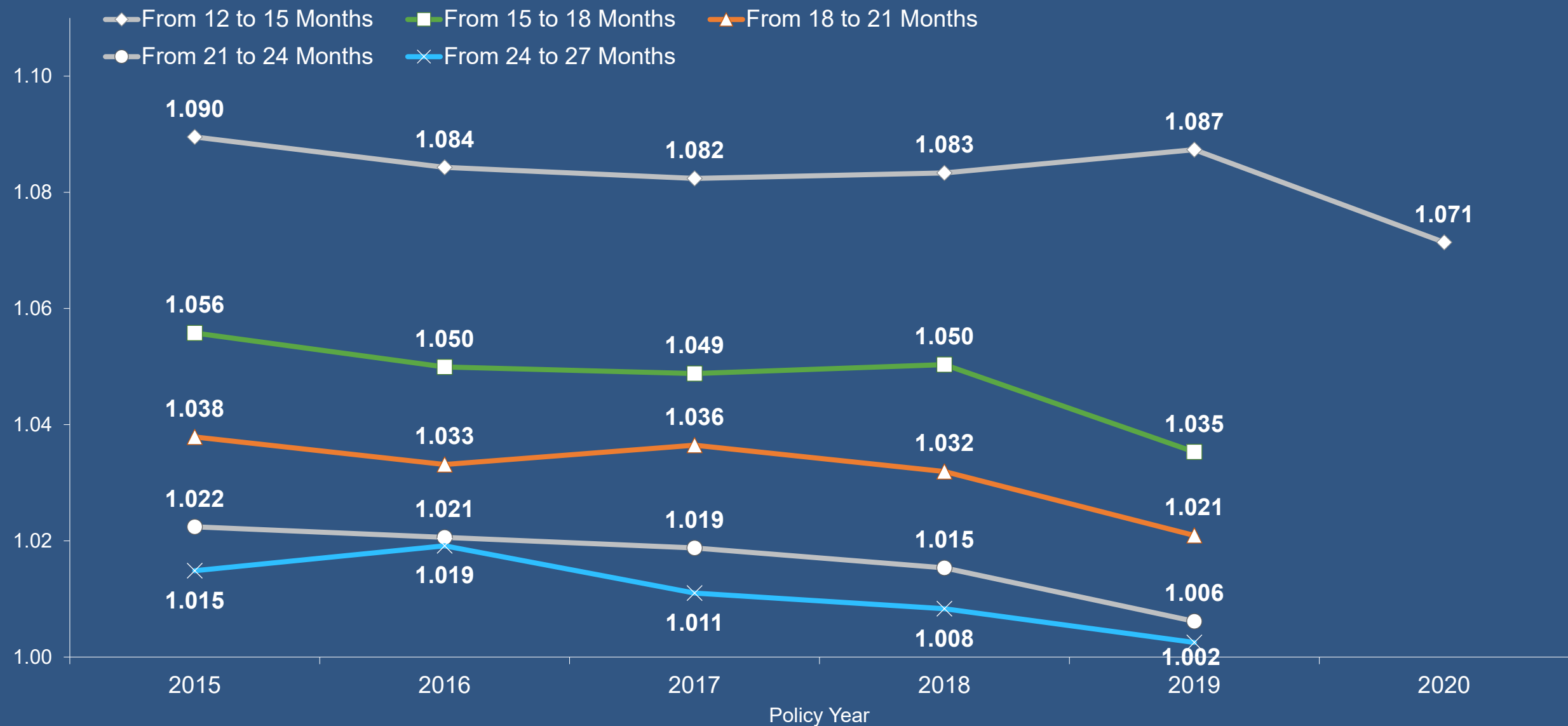
Cumulative Paid ALAE Development from 12 to 90 Months

As of March 31, 2021



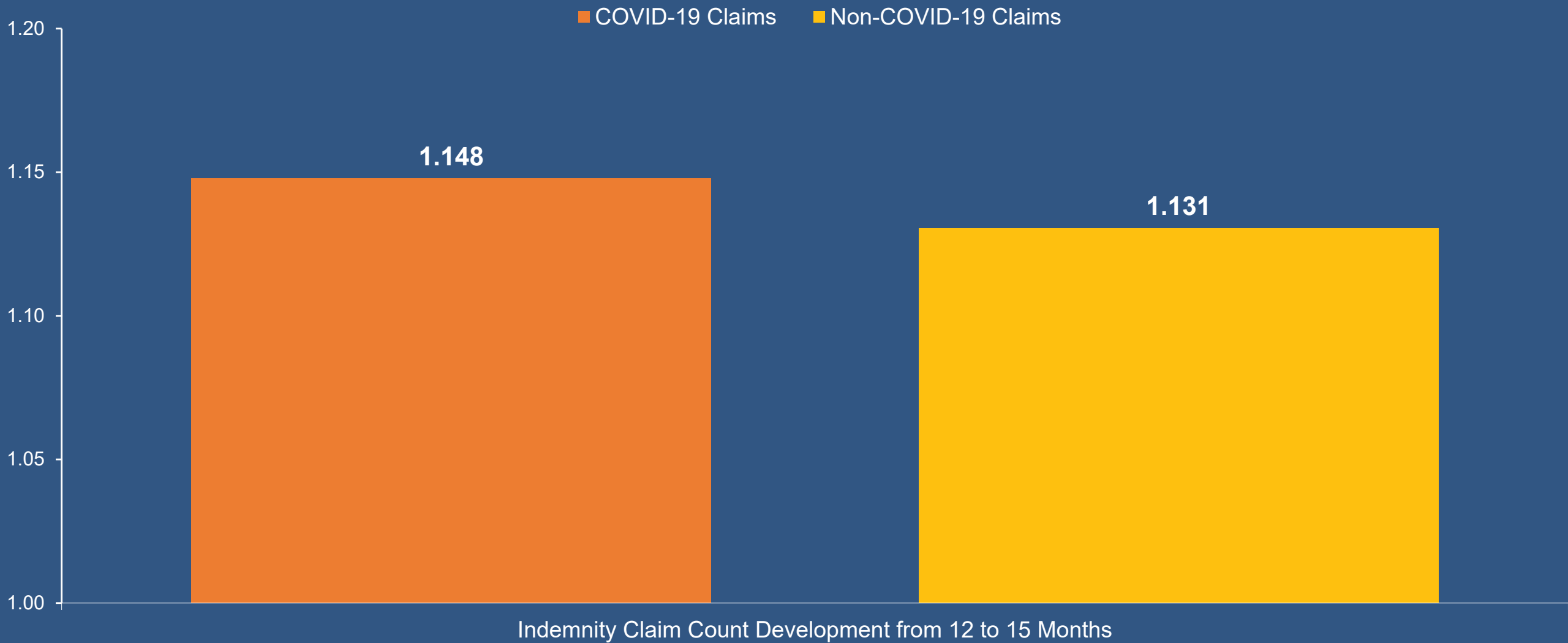
Written Premium Development

As of March 31, 2021



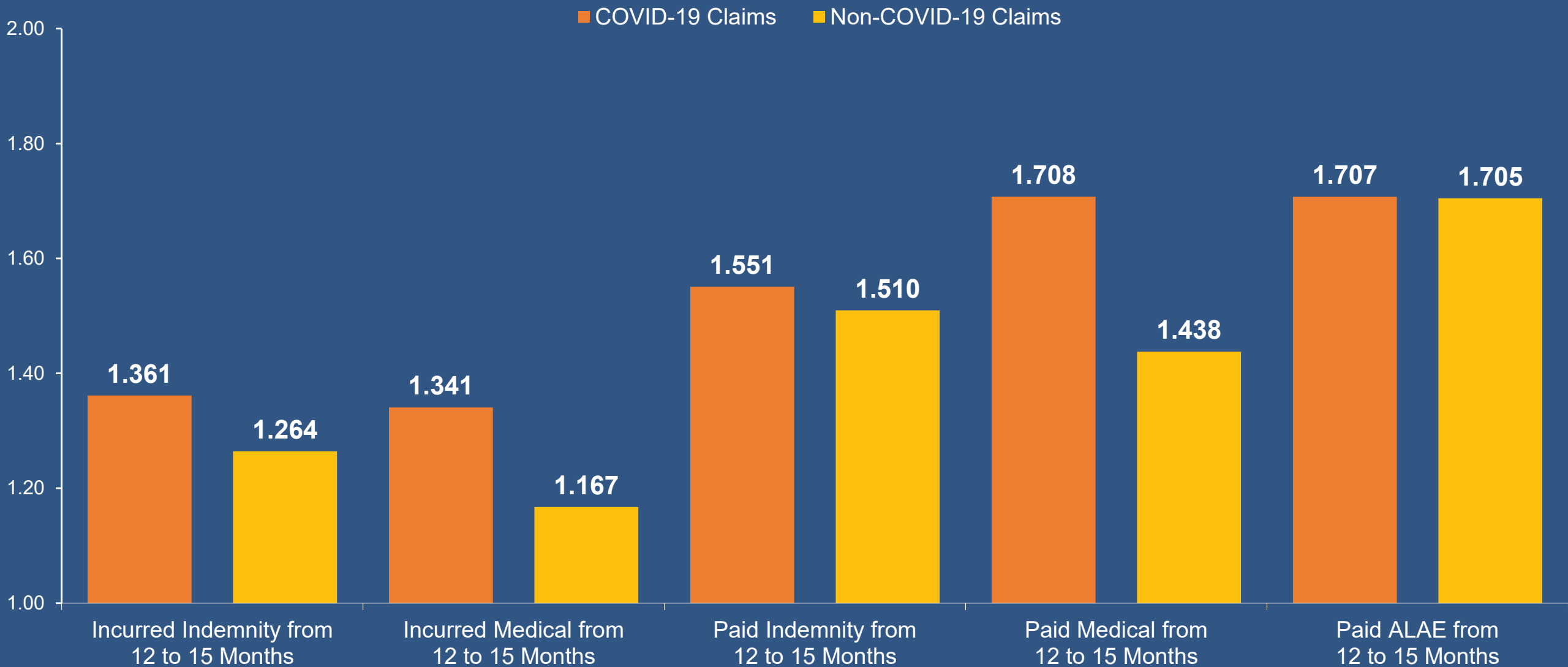
COVID-19 Claims – AY 2020 Count Development

As of March 31, 2021



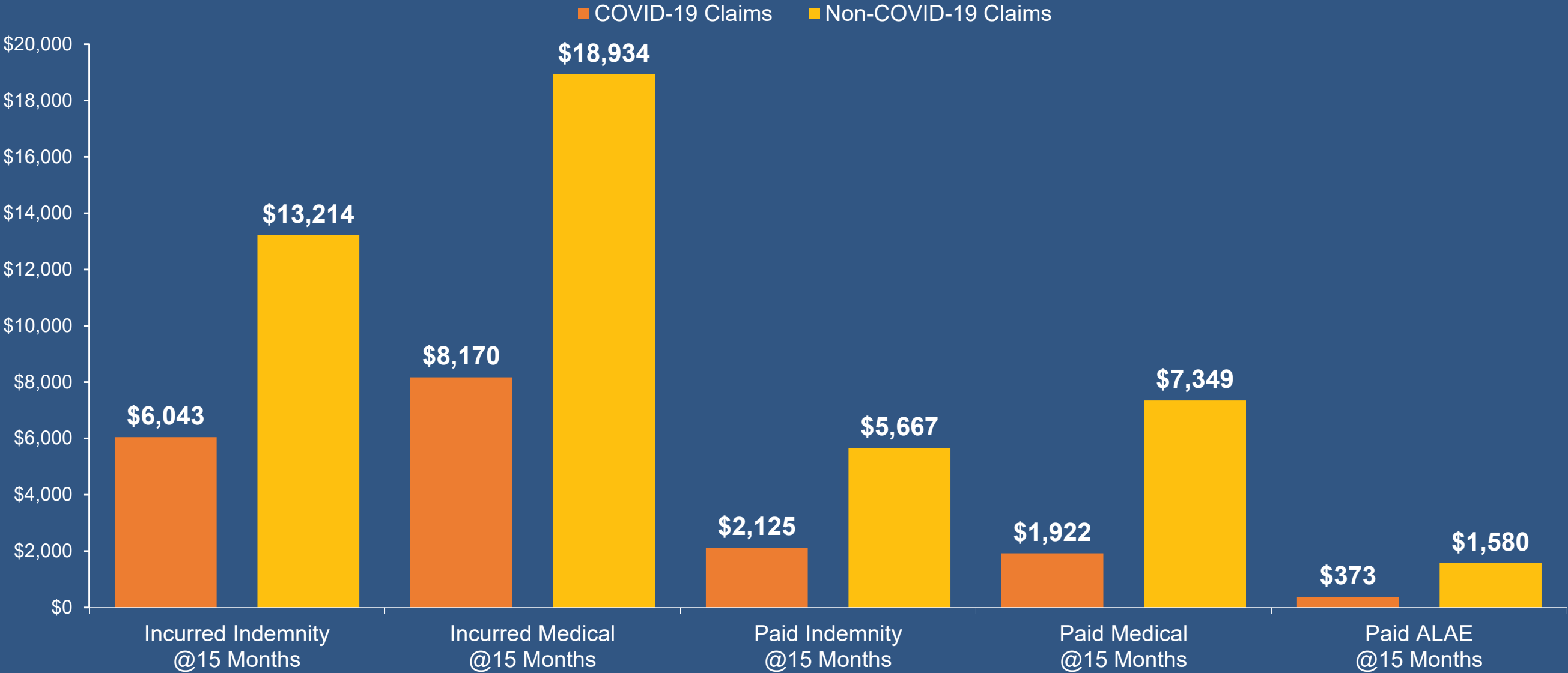
COVID-19 Claims – AY 2020 Loss/ALAE Development

As of March 31, 2021



COVID-19 Claims – AY 2020 Cost per Indemnity Claim

As of March 31, 2021



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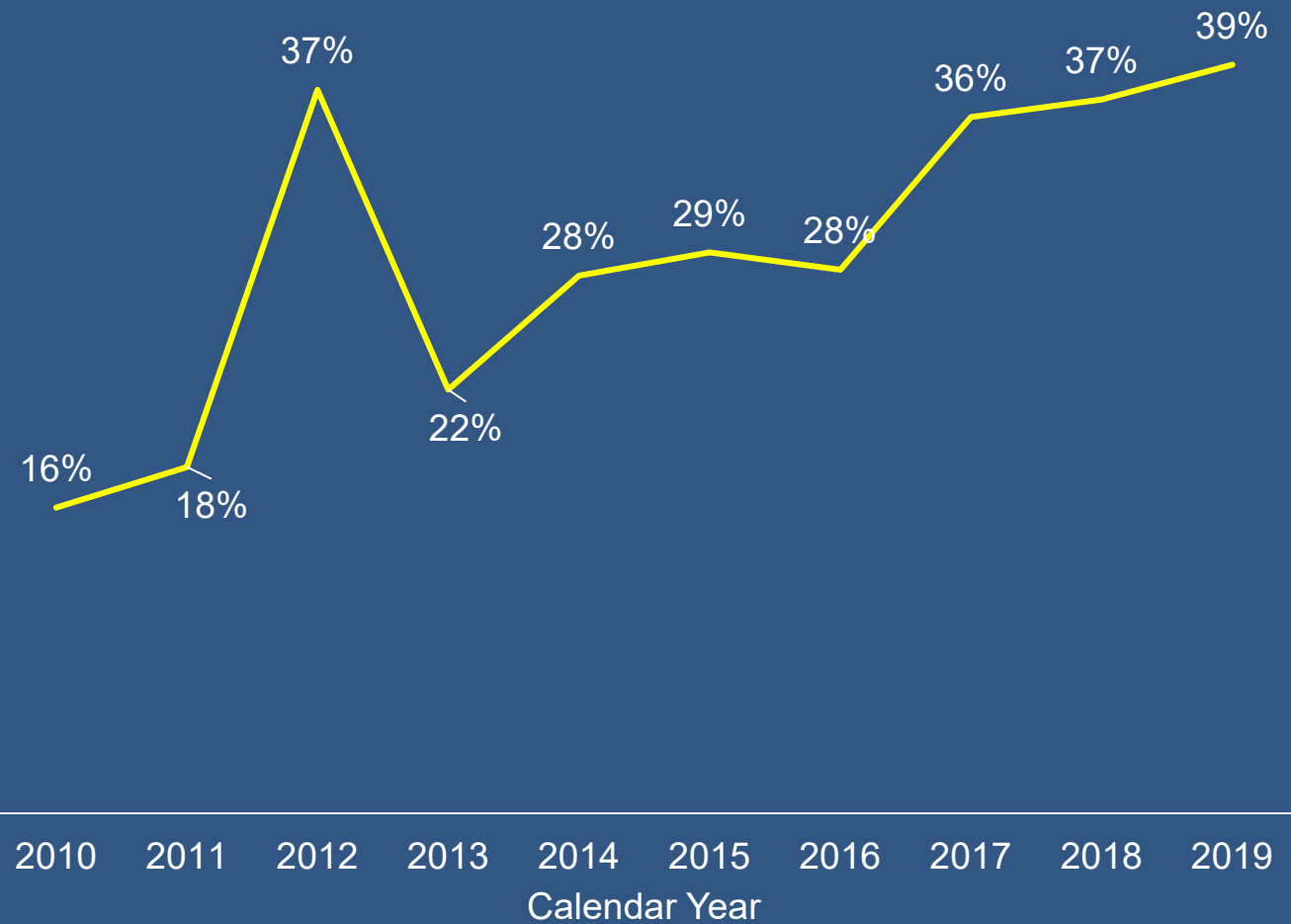
Impact of High Deductible Health Plans



Background – High-Deductible Health Plans

- High-deductible health plans (HDHPs) tend to have low premiums but high consumer cost-sharing and often lead to high patient out-of-pocket payments for medical care.
- Prevalence of HDHPs has been increasing steadily especially after the implementation of the Affordable Care Act.
 - Pre-2012: < 18%
 - Post-2012: >30%
- The average annual deductible among HDHPs increased by about 40% between 2013 and 2019.

Share of California Workers with High-Deductible Health Plans



Background – Cost Shifting Impact of High-Deductible Plans

- While consumer cost-sharing has increased significantly in HDHPs, workers' compensation continues to have no cost sharing for injured workers.
- Published studies have shown that workers that have high-deductible group health plans may be more likely to:
 - File a workers' compensation claim involving certain medical conditions
 - Seek care for certain injuries in the workers' compensation system instead of group healthcare system
- Certain injuries that may not be clearly linked to a workplace incidence may be treated in the workers' compensation system more often in the earlier part of the year than in the later part as workers with HDHPs often have not met their annual deductibles early in the year.
- The WCIRB has conducted a preliminary analysis on the potential impact of HDHPs on claim frequency and utilization of medical services in the workers' comp system.

Research Questions

1. Is there any evidence of cost shifting among specific service types, such as *physical therapy*, *pharmaceuticals (brand name vs. generic)*, and *surgery* due to the impact of HDHPs?
 - **Hypothesis**: HDHPs may lead to cost shifting from group health to workers' comp in Q1 in recent years. We expect to see lower utilization of selected medical services in Q4 compared to Q1 of the same year.
 - Control group:
 - The patterns of ER services should not be affected by the HDHPs.
2. Do HDHPs affect soft tissue claim frequency in the workers' compensation system?
 - **Hypothesis**: There may be a lower frequency of soft tissue claims in Q4 compared to Q1.
 - Control group:
 - Frequency of traumatic injuries such as fractures should not be affected by the HDHPs.

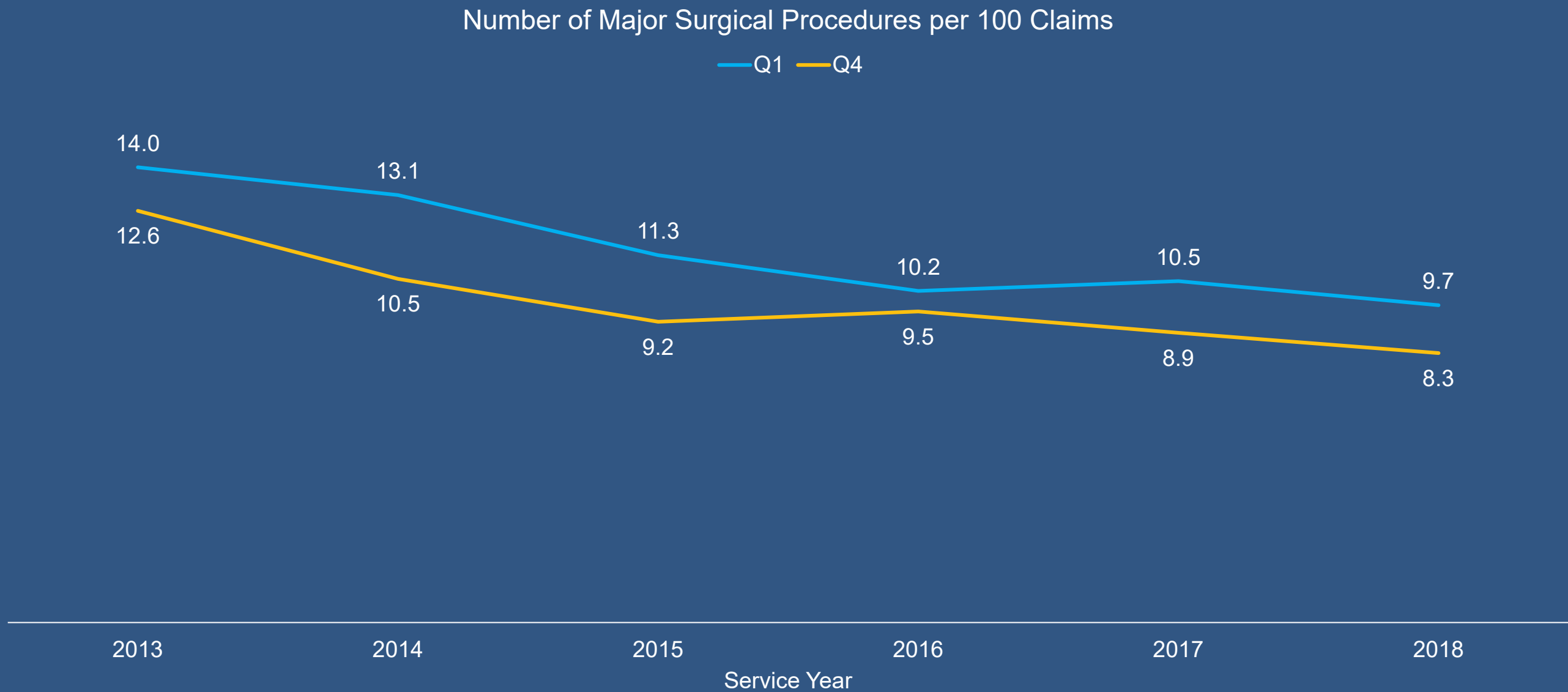
Analysis Approach

- Data sources: WCIRB Medical Transaction Data and USR Data
- Inclusion and exclusion criteria:
 - Identified medical service types more likely to be impacted by the increasing prevalence of HDHPs
 - Selected medical services in service years 2013 through 2018
 - Identified workers more likely to have HDHPs:
 - Working age: 18 – 64* years old (excl. Medicare recipients)
 - Income level: Annual salary > \$20,000* (excl. Medi-Cal recipients)
 - For Soft Tissue Injury Claims
 - Accident years: 2013 – 2018
 - Diagnostic groups involving soft tissue injuries or low back pain
 - Body parts of shoulder, neck, knee and back
 - For Fracture Claims
 - Accident years: 2013 – 2018
 - Diagnostic groups involving fracture on upper and lower extremities
 - Claims where first service date is on the same day as accident date
- Compared service utilization as well as claim frequency in Q4 to Q1 of each year to assess the impact of HDHPs

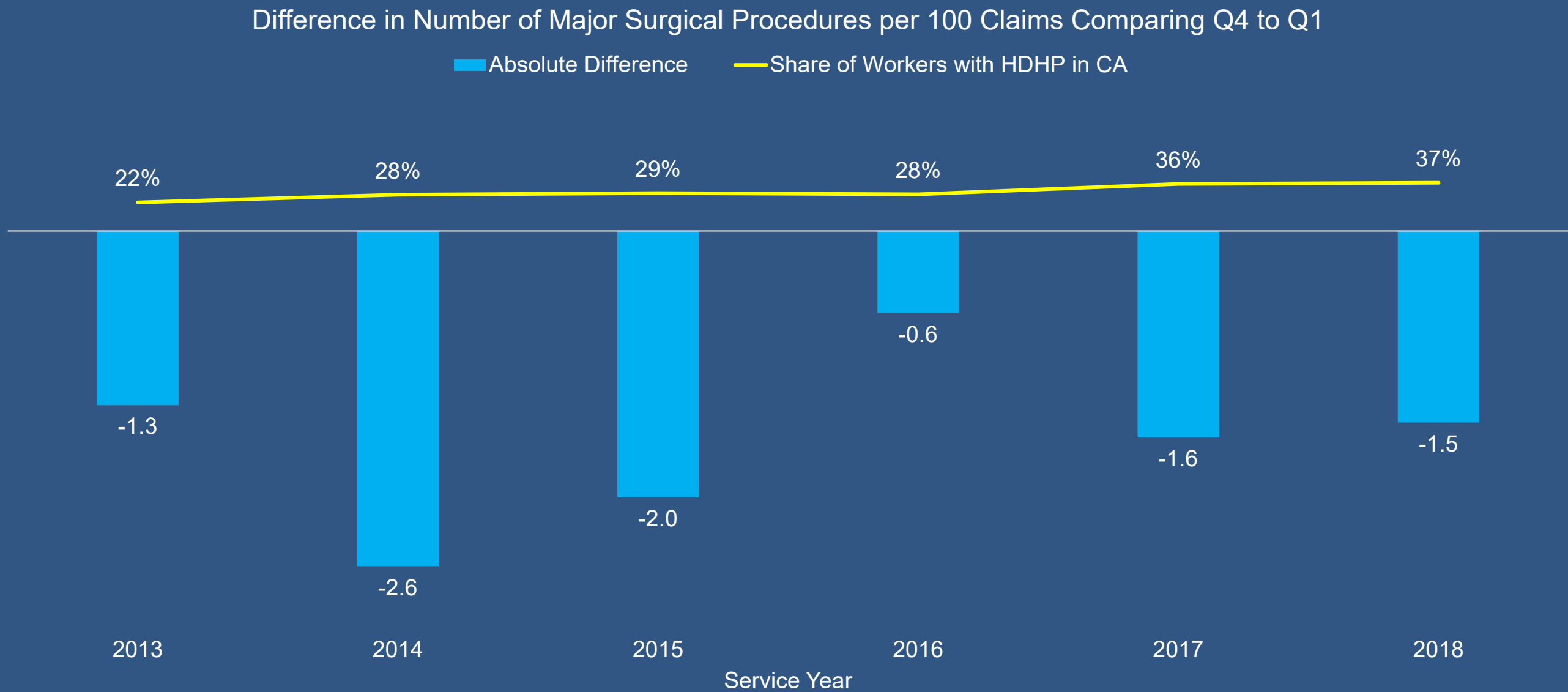
Summary of Preliminary Results

Types of Service	Years with Lower Frequency in Q4 Compared to Q1	Years with Counter-results
Major Surgeries	2013-2018	
Knee Arthroscopy	2013-2018	
Physical Therapy (among Soft Tissue Claims)	2013-2016, 2018	2017
Brand Name Drugs	2013-2018	
Generic Drugs	2014-2018	2013
Soft Tissue Injury Claims	2013-2014, 2016-2018	2015
Fracture Claims - <i>Control Group</i>	2013	2014-2018
Emergency Room Procedures - <i>Control Group</i>		2013-2018

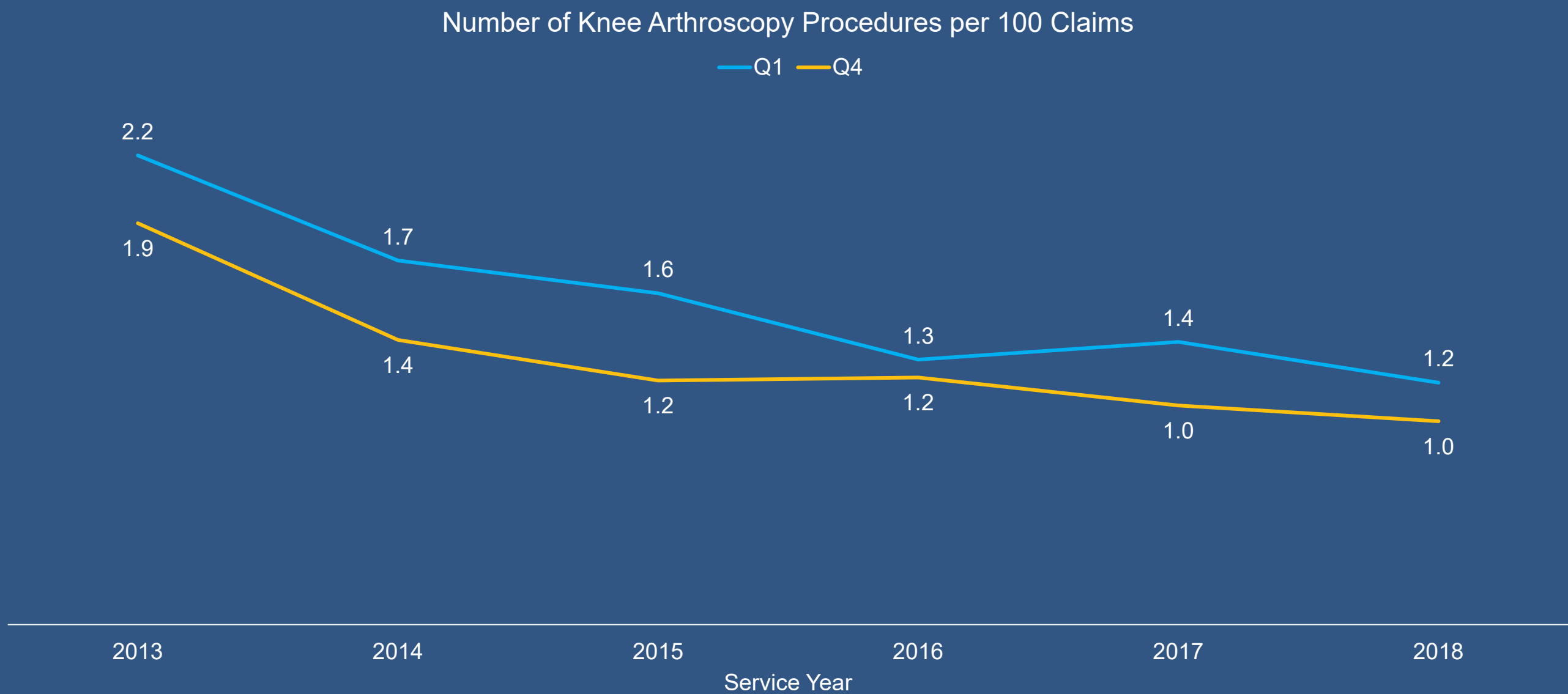
Major Surgical Procedures



Major Surgical Procedures

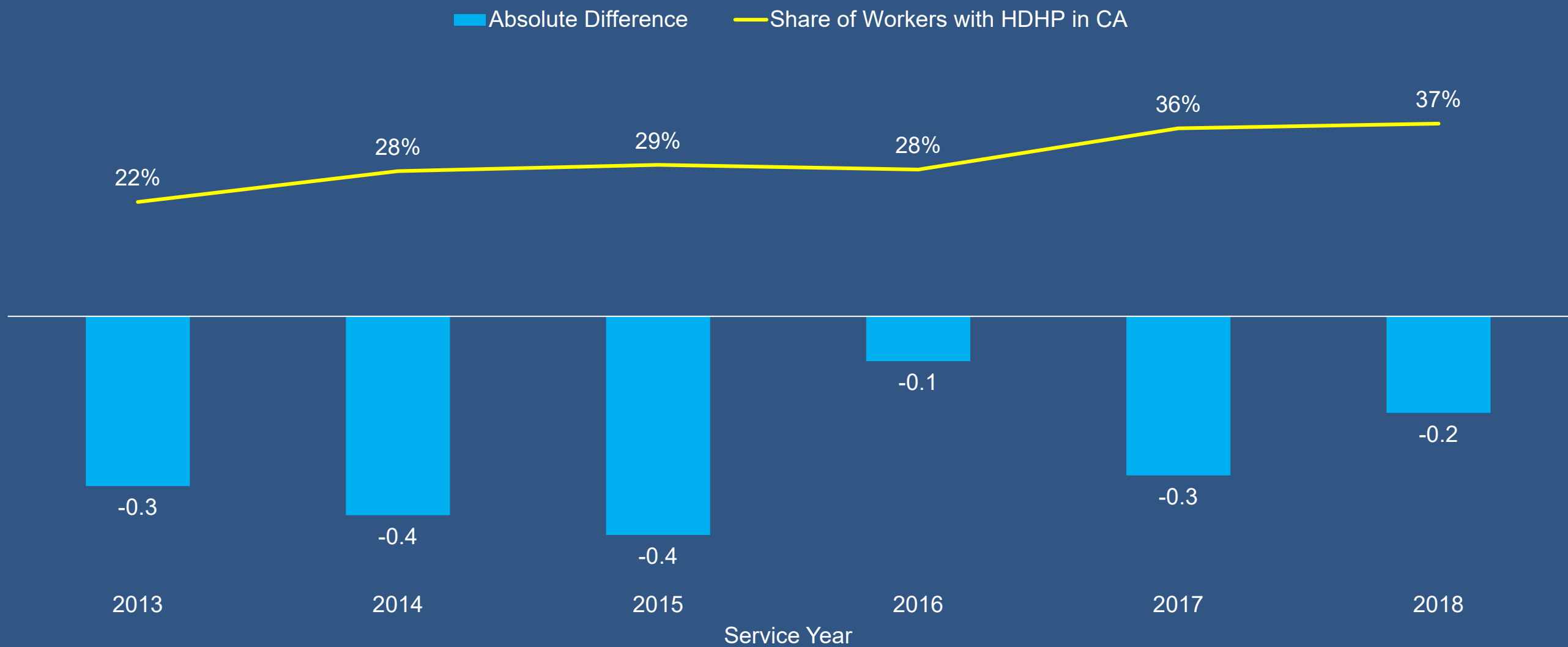


Knee Arthroscopy Procedures

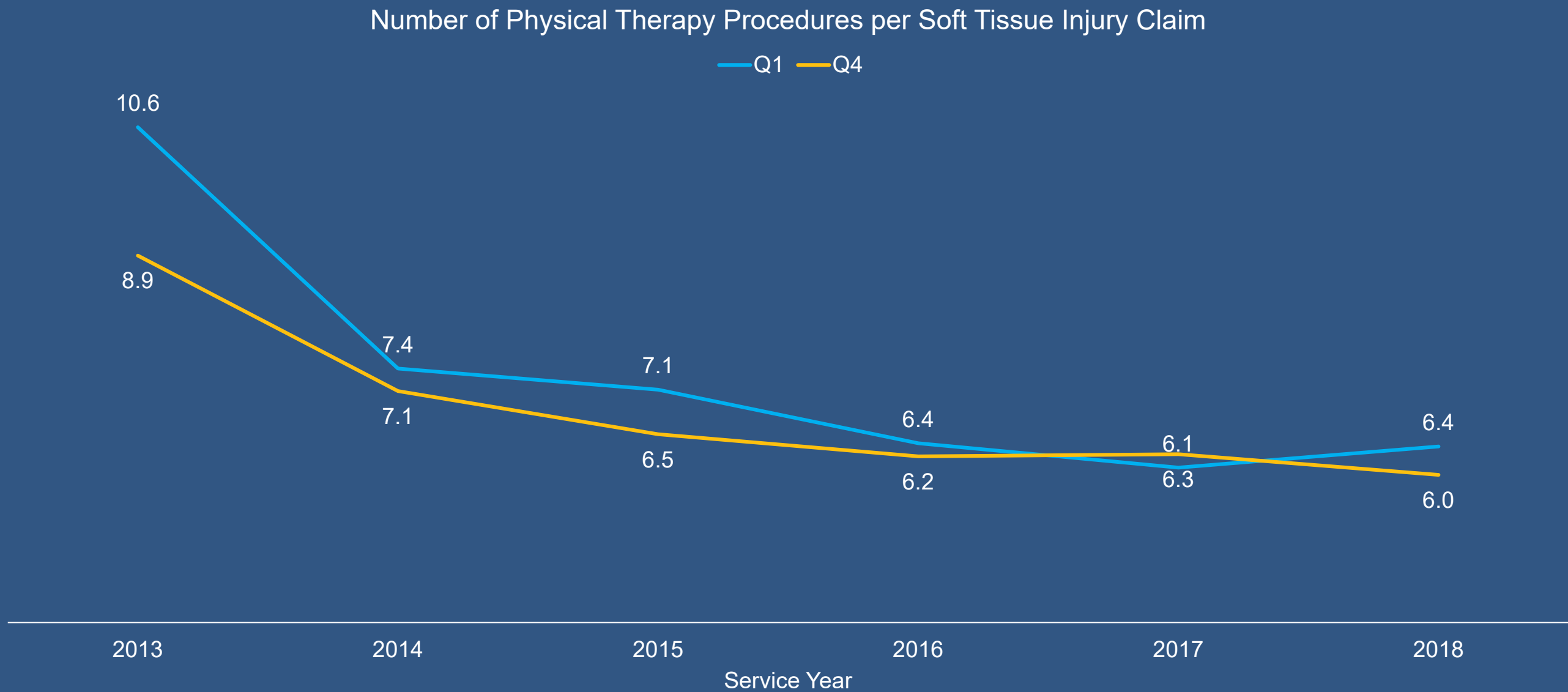


Knee Arthroscopy Procedures

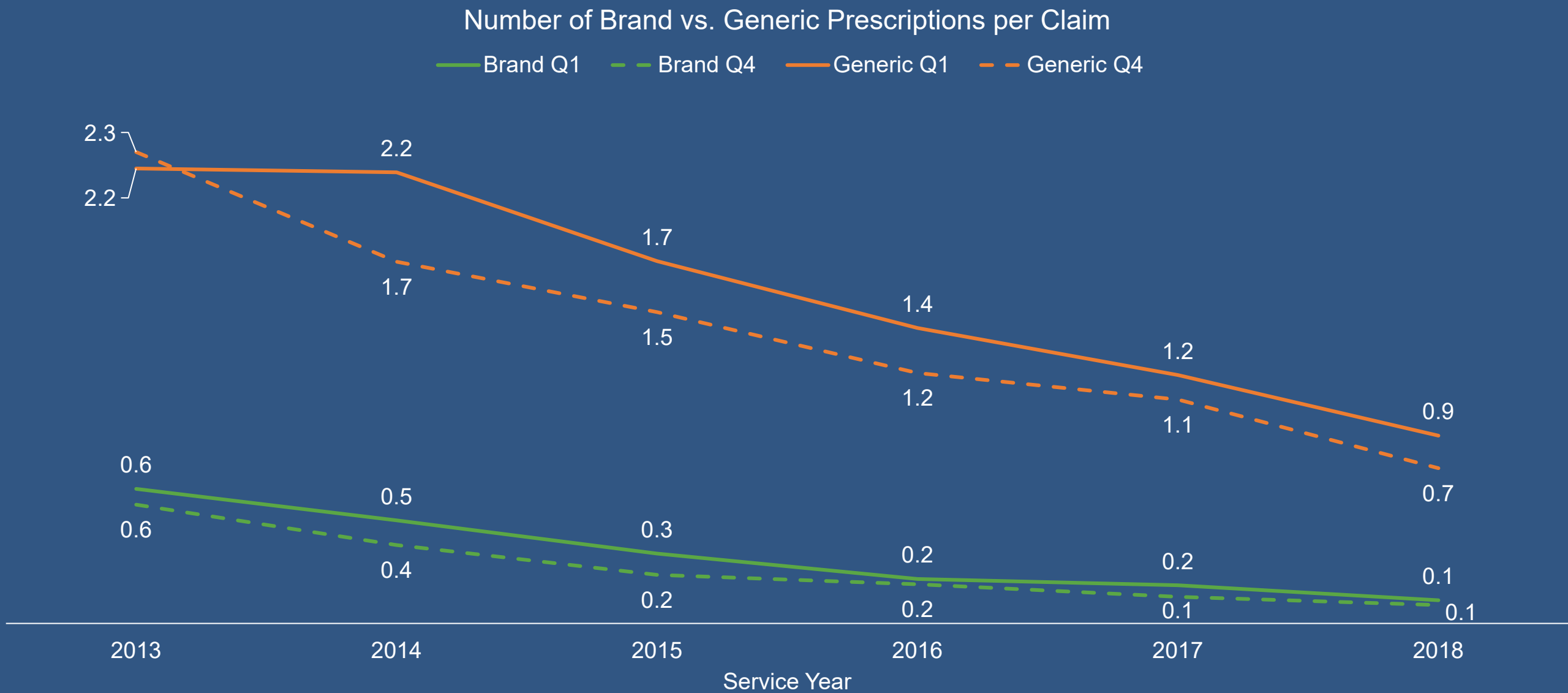
Difference in Number of Knee Arthroscopy Procedures per 100 Claims Comparing Q4 to Q1



Physical Therapy among Soft Tissue Claims



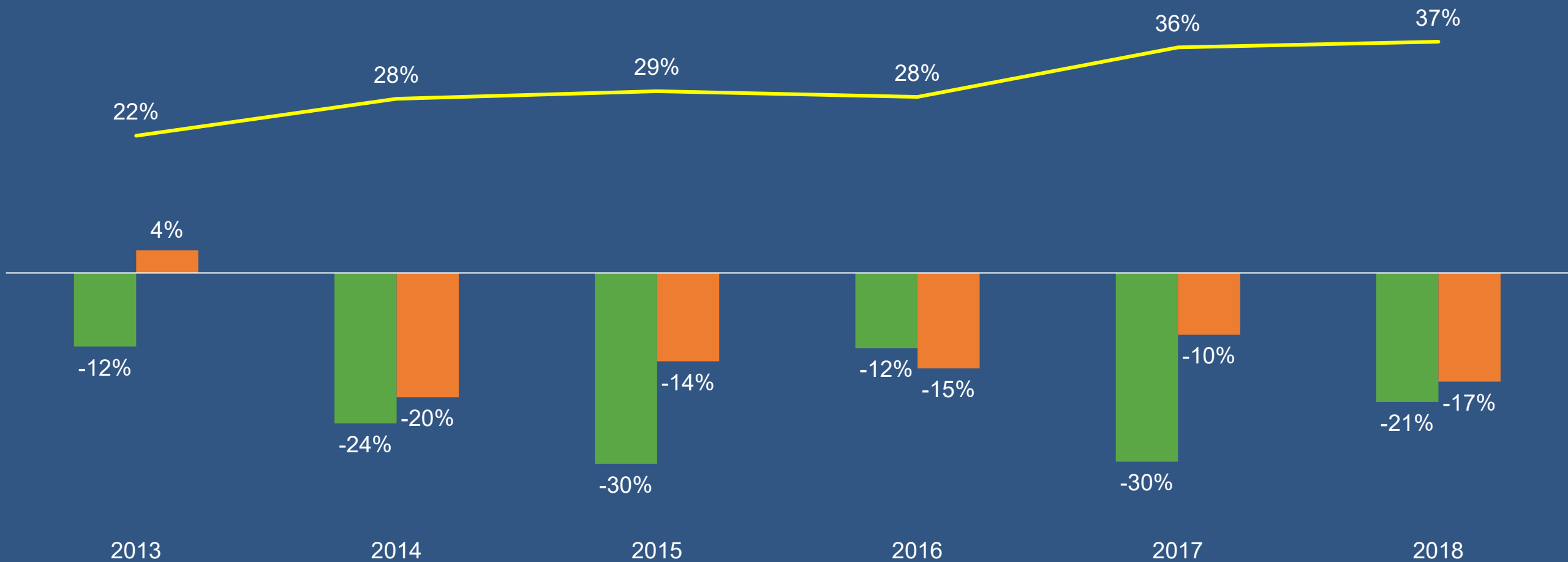
Brand Name vs. Generic Drugs



Brand Name vs. Generic Drugs

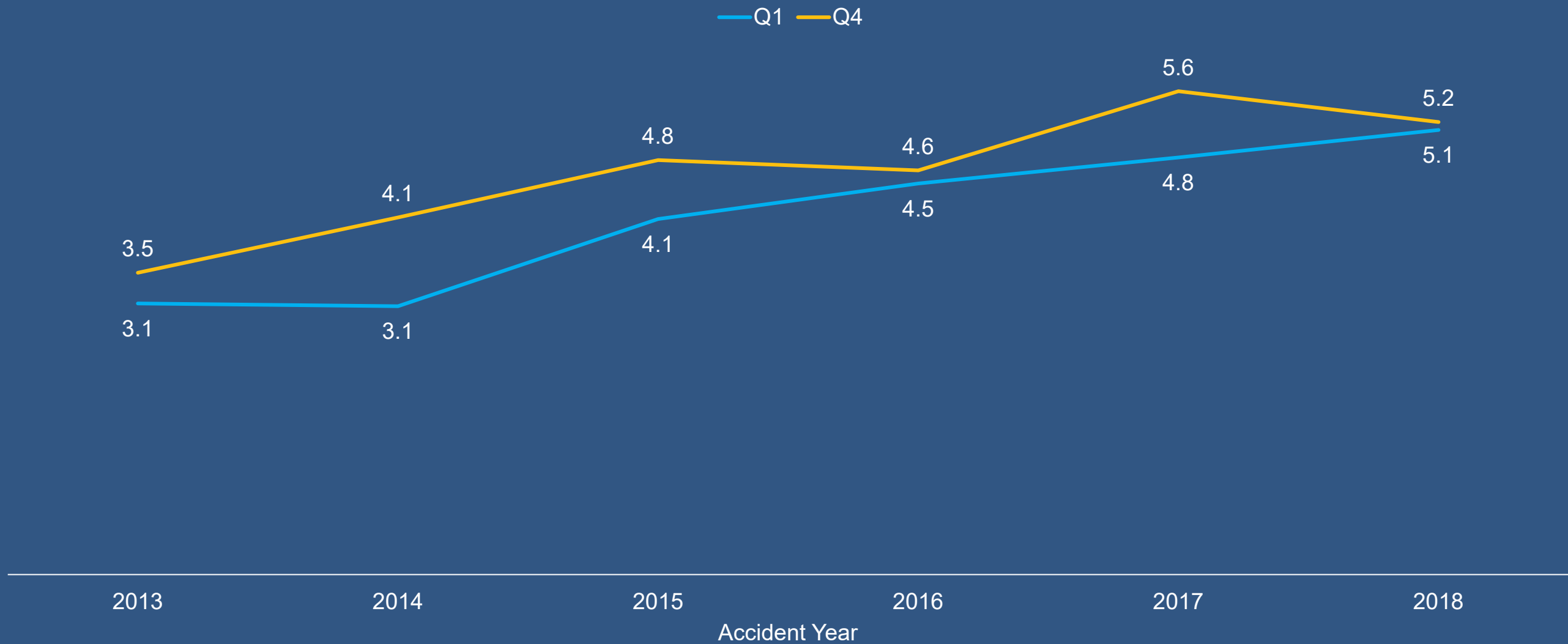
Difference in Share of Brand vs. Generic Prescriptions per Claim Comparing Q4 to Q1

■ Percent Difference - Brand ■ Percent Difference - Generic — Share of Workers with HDHP in CA



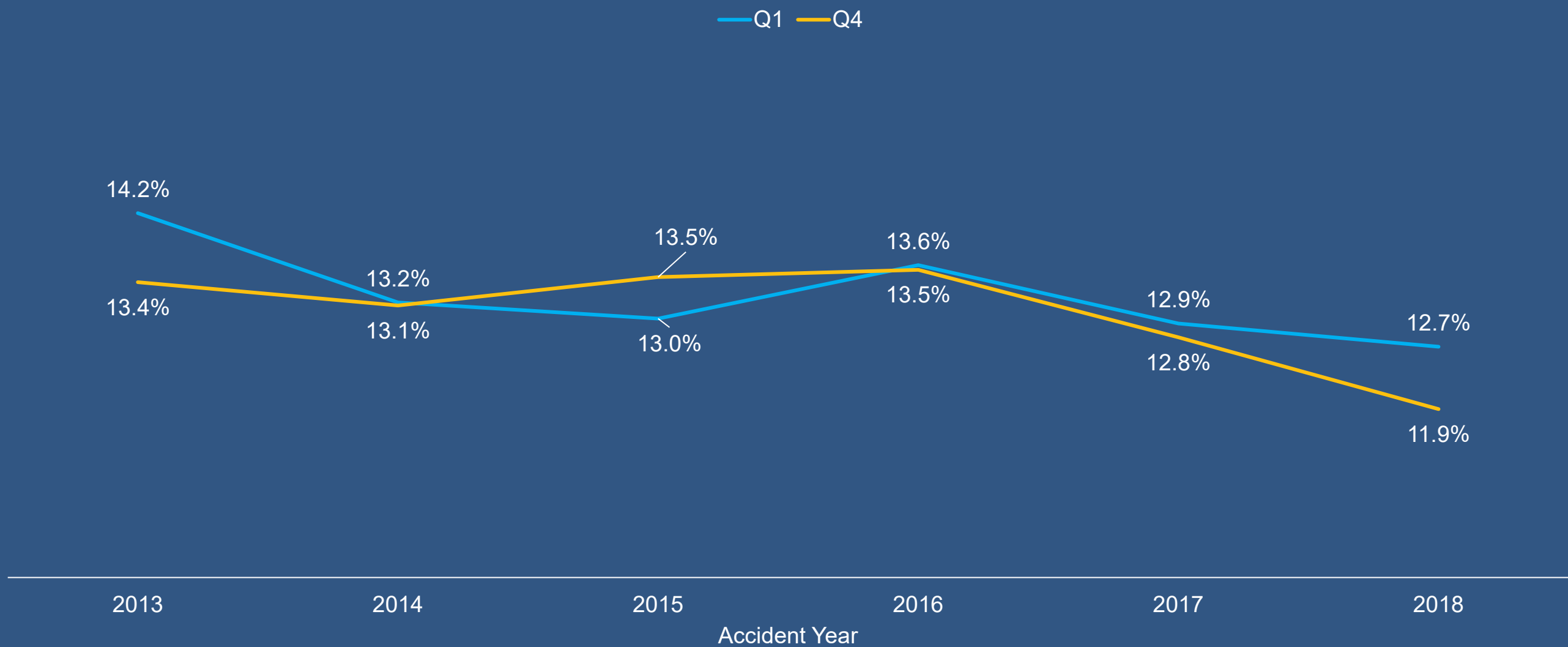
Emergency Room Procedures

Number of ER Procedures per 100 Claims



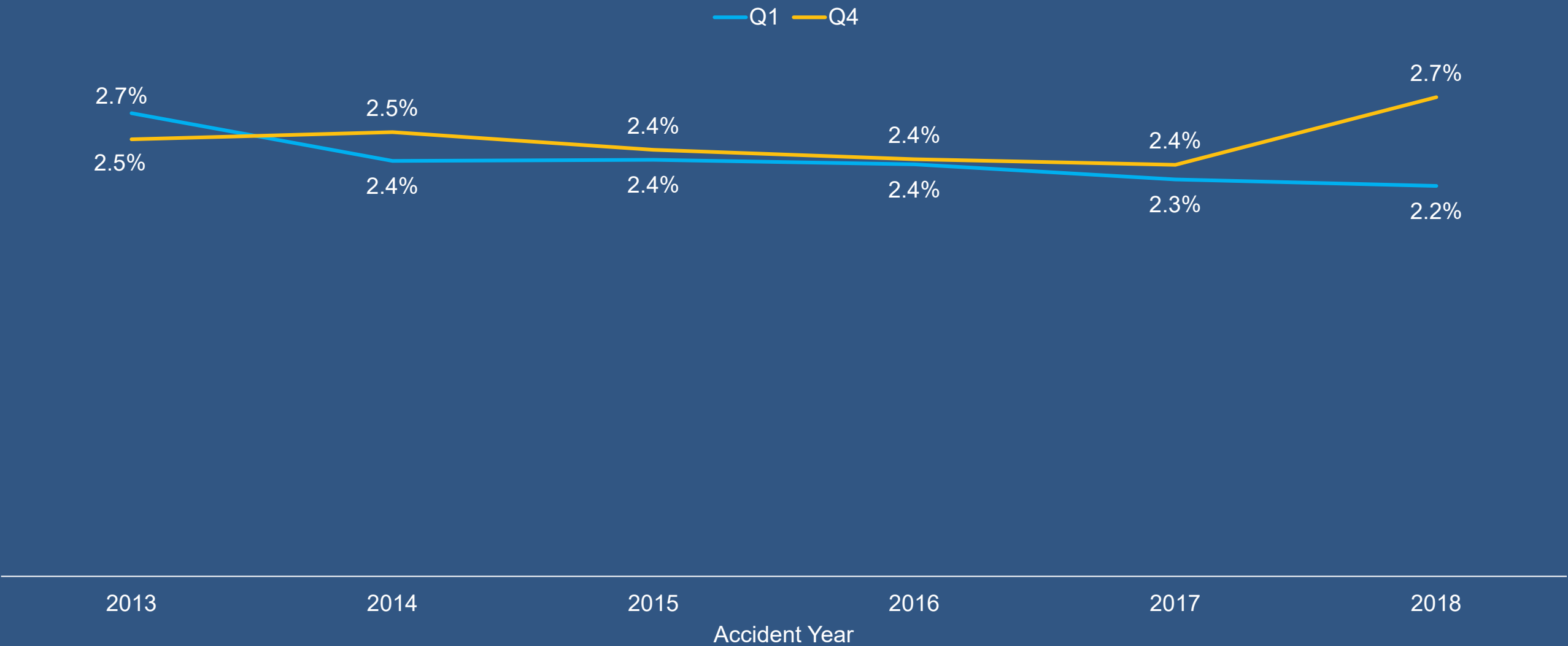
Soft Tissue Injury Claims

Share of Claims with Soft Tissue Injuries



Fracture Claims

Share of Claims with Fracture



Summary of Preliminary Findings

- Some limited evidence of potential cost-shifting from group health to workers' comp among major surgeries, knee arthroscopies, and pharmaceuticals.
 - Less evidence of cost-shifting among physical therapy services and soft tissue claims.
- There is no evidence of cost-shifting among our control group of fracture claims and ER procedures.

Next Steps

- Exploring wage and industry sector information
- Utilizing a new group health dataset from IBM (MarketScan data)
 - Medical transaction data
 - Indicator for high-deductible health plans
 - Detailed information on insurance coverage and cost sharing
 - Enables a more in-depth analysis on the cost shifting impact of the changes in group health insurance coverage
 - Enables more comparative analyses of group health and workers' comp system

05

WCIRB Member Analytic Tools



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