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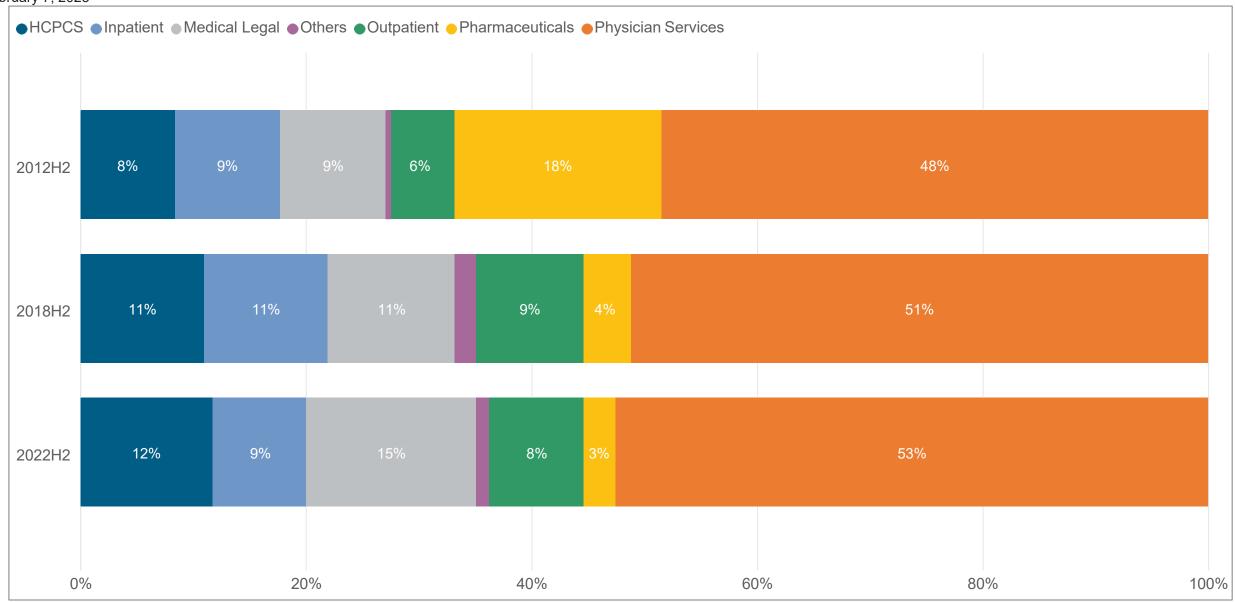


01

**Update on Medical Severity Trends by Component** 



#### **Share of Total Medical Payments by Service Type**





<sup>\*</sup> 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.

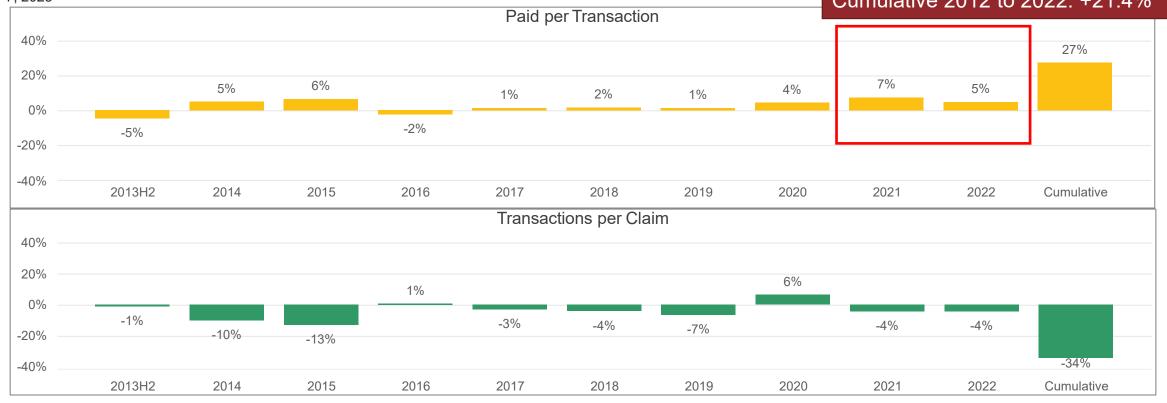
Source: WCIRB medical transaction data collected beginning in the third quarter of 2012.

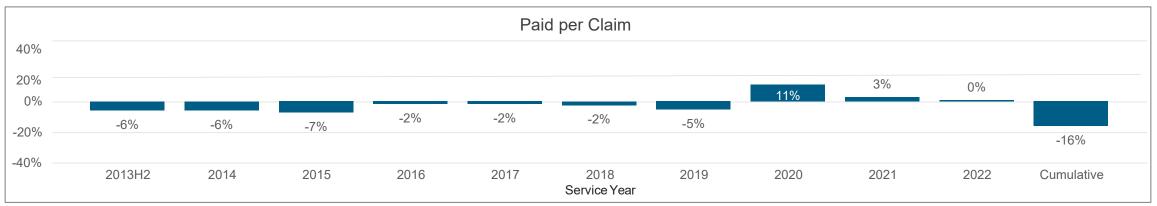
#### % Change in All Medical Services Cost per Claim

As of February 7, 2023

CPI-U: Medical care services 2020 to 2021: +1.9% 2021 to 2022: +4.3%

Cumulative 2012 to 2022: +21.4%



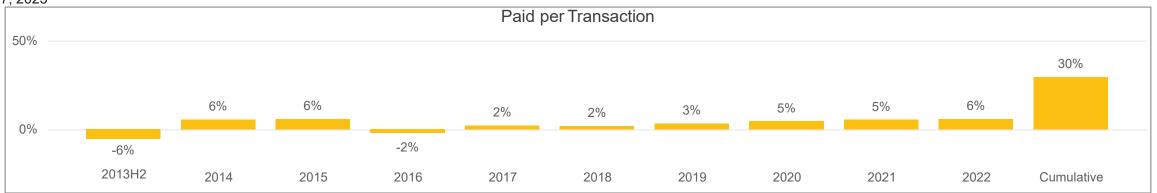


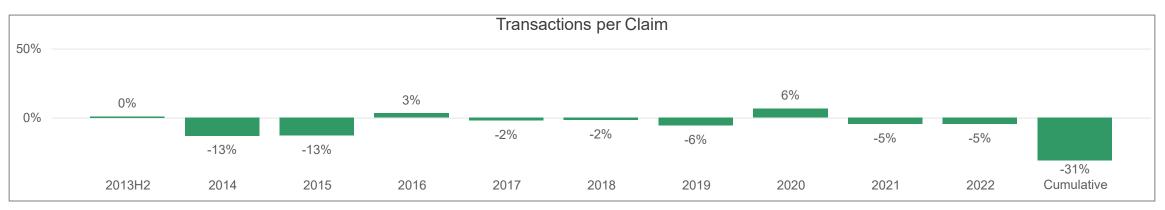


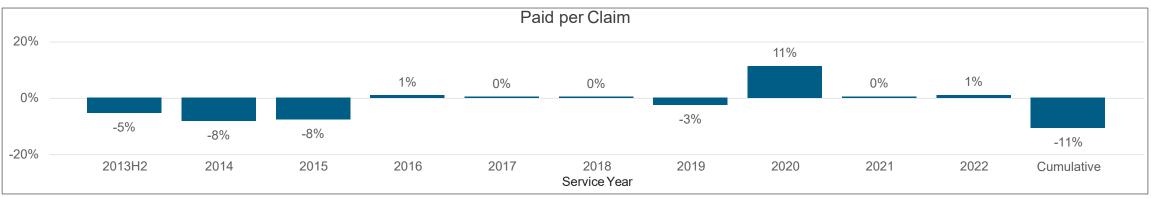
Source: WCIRB medical transaction data collected beginning in the third quarter of 2012. COVID-19 claims were excluded from the analysis and the exclusion applies to all subsequent slides. Bureau of Labor Statistics.

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

As of February 7, 2023





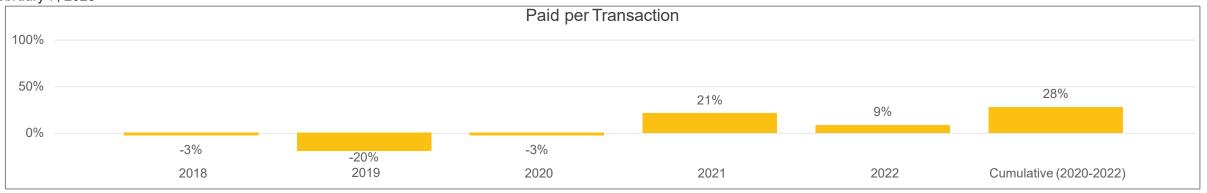


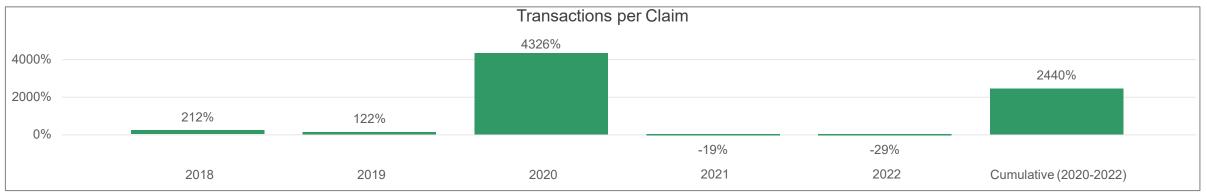


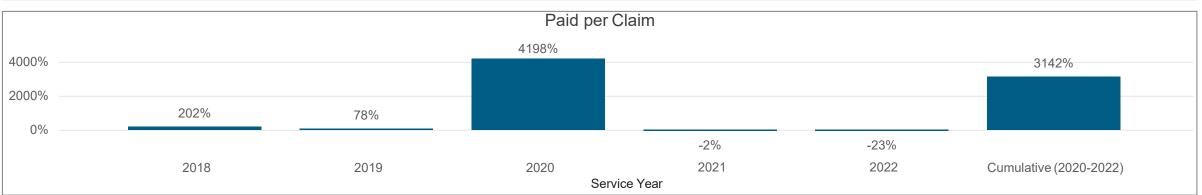
<sup>\*</sup> All medical payments are defined as the total Paid Amount (excluding Liens) in Service Year 2022 in the WCIRB medical transaction data. This definition applies to all subsequent slides.

#### % Change in *Telemedicine* Cost per Claim (1.4% of All Medical Payments)

As of February 7, 2023



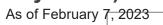


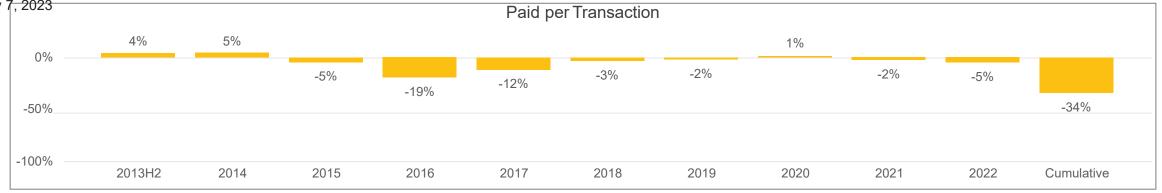


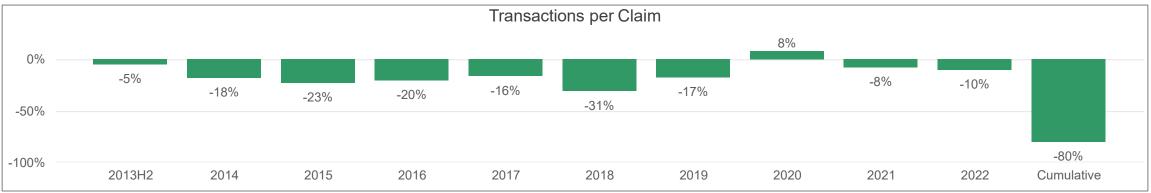


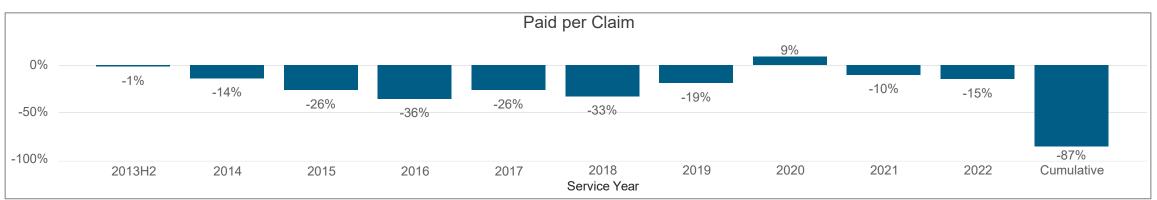
Note: Telemedicine services provided before March 1, 2020 are defined as any procedures with Place of Service 02 or modifier 95 (excluding Special Services & Reports, Medical Legal, Copy Services, and Interpreter Services). For telemedicine services on or after March 1, 2020, only services from CMS list of telehealth services are included pursuant to the DWC rules.

#### % Change in *Pharmaceutical* Cost per Claim (2.6% of All Medical Payments)





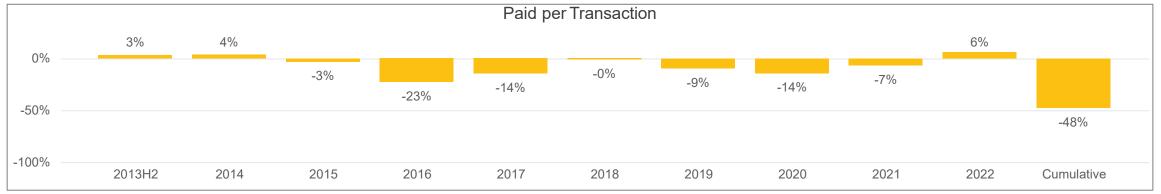


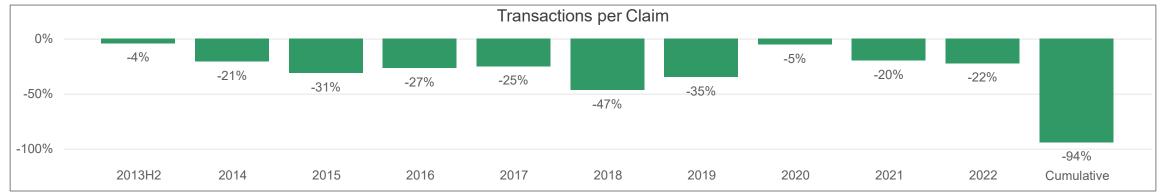


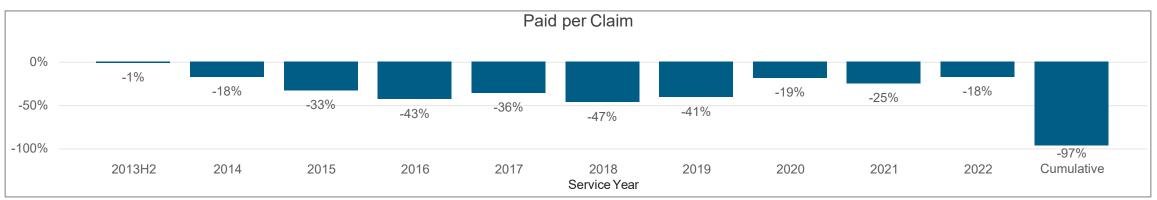


#### % Change in *Opioid* Cost per Claim (0.2% of All Medical Payments)

As of February 7, 2023



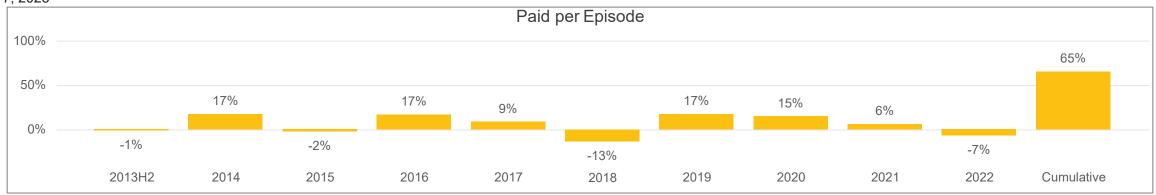


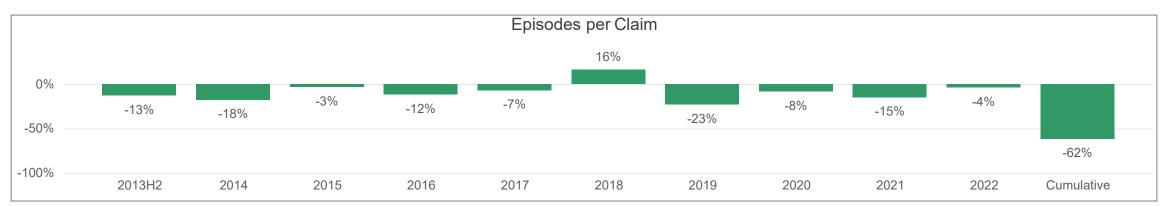


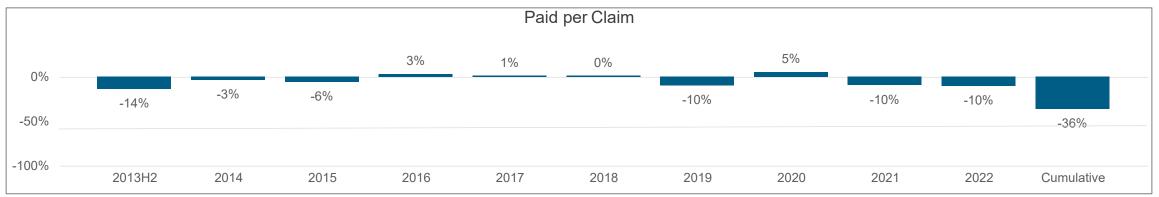


#### % Change in *Inpatient* Cost per Claim (episode-based) ( 9% of All Medical Payments)

As of February 7, 2023



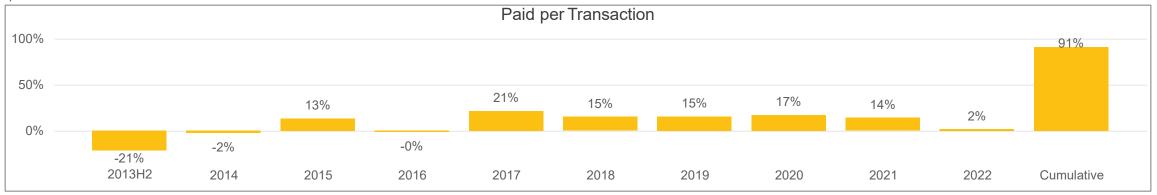


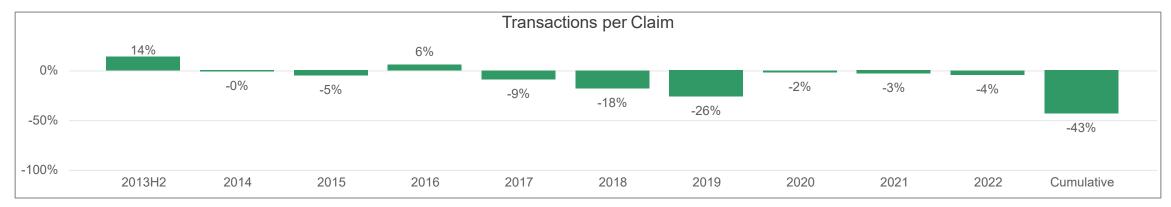


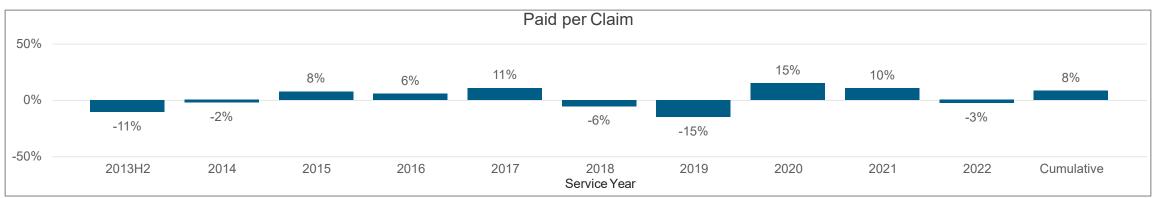


#### % Change in *Outpatient* Cost per Claim (9% of All Medical Payments)

As of February 7, 2023



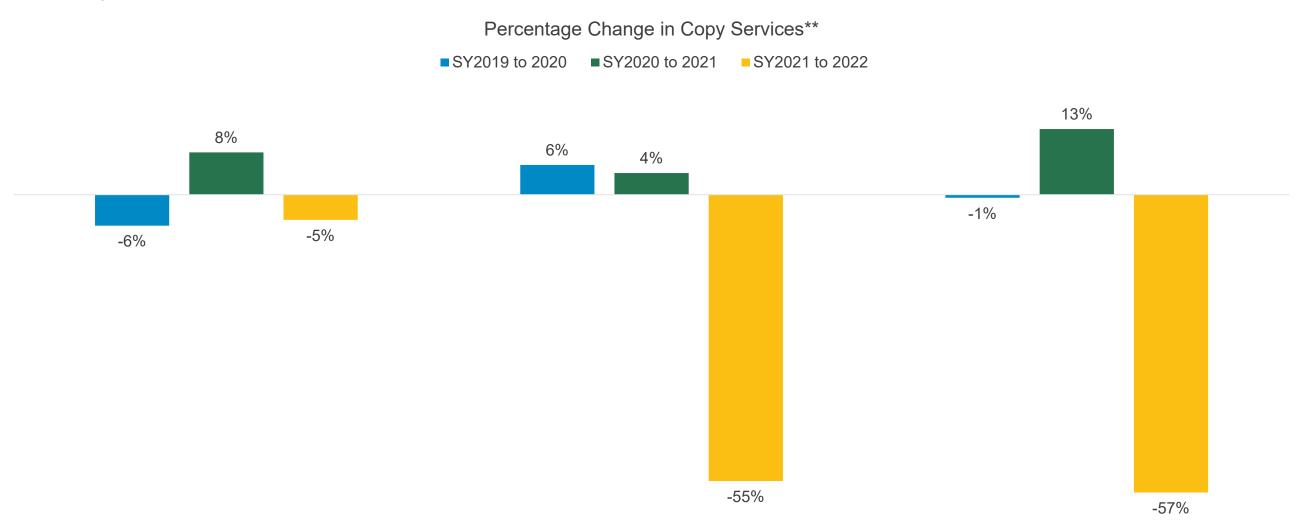






## Percent Change in Copy Services (0.7% of All Medical Payments in 2021\*)

As of February 06, 2023



Paid per Transaction Transactions per Claim Paid per Claim

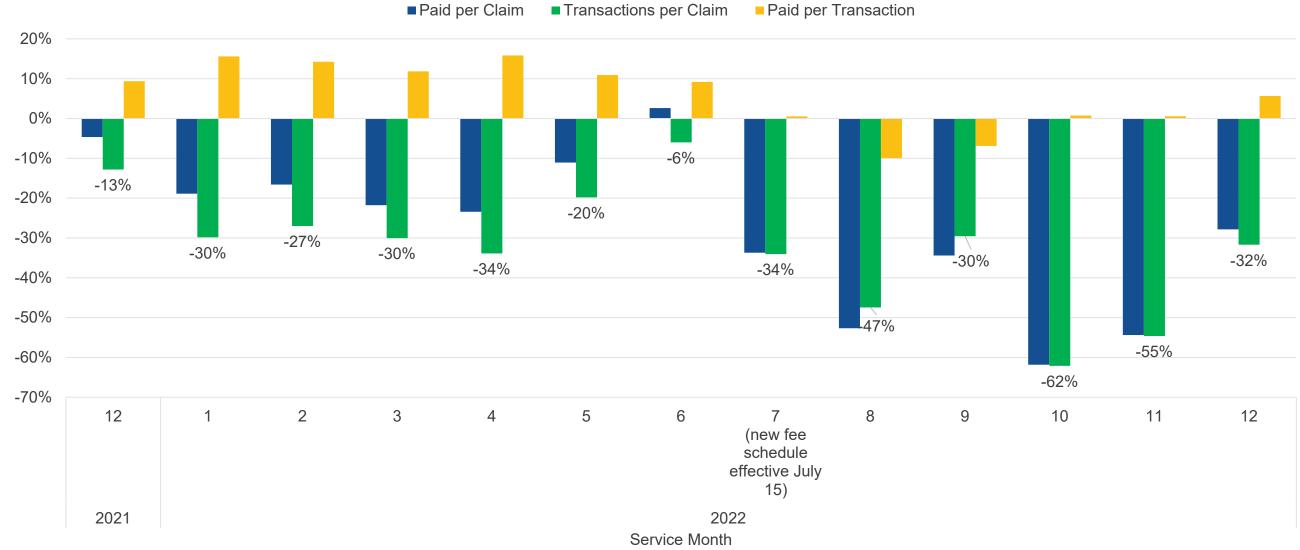


<sup>\* 2021</sup> WCIRB Losses and Expenses Report

<sup>\*\*</sup> Each service year includes services from July 15 to December 31 as the new Copy Service Fee Schedule was effective July 15, 2022. Source: WCIRB medical transaction data.

#### Percent Change in Copy Services by Service Month







#### **Summary of Medical Severity Trends through 2022**

- Overall medical cost per claim:
  - +3% in 2021 relative to 2020, partly driven by the 2021 fee schedule changes (medical-legal and E/M office visits)
  - 0% change in 2022 relative to 2021
    - Paid per transaction: +5%, driven mostly by E/M office visits, medical-legal services and medical inflation reflected in the Medicare fee schedules
    - Transactions per claim: continued to decline (-4%) across all service types except for an increase in medical-legal services
- Number of telemedicine services per claim continued to drop (-29%) in 2022, but still more than 24-fold higher since 2020 compared to the pre-pandemic period
- Further declines in pharmaceutical paid per claim in 2022 (-15%)
- Reported copy service payments per claim declined by 57% in 2022, mostly driven by a significant drop in the reported copy service transactions.
  - Decline in copy service transactions pre-dates the new fee schedule
  - Some recent copy services costs are being paid outside normal "bill review" process



# 02

Impact of Economic Downturn on Pure Premium Rate Indications



#### Introduction

- March 21 Meeting
  - Changes in employment levels and industry mix
  - Impacts of industry mix changes on frequency, severity, and average wage
  - Impact of economic forecasts on frequency model projections
  - Preliminary discussion of average wage change selections
- WCIRB Use of Economic Data and Forecasts
- Statewide Average Wage Change Selections for 9/1/2023 Filing



#### **Economic Data – WCIRB Indemnity Claim Frequency Model**

- Historic data used to fit model
  - Adjusted to a common industry mix
    - Adjustment uses classification payroll data from USR
  - USR payroll data is adjusted to a common wage level
    - Wage on-level adjustment uses historic government data
    - Any industry mix or wage distribution adjustments selected for ratemaking are applied
  - Economic variables use historic government data
- Model projections
  - Economic explanatory variable uses forecast data from UCLA
  - No adjustments are made for wage changes or industry mix
    - The model is fit using an adjusted series, so the output does not require adjustment
    - Impact of UCLA forecast changes in industry mix is provided as an informational item



#### **Economic Data – Statewide Average Wage Change**

- Historic wage changes are observed changes compiled by government agencies
- Projected wage changes are the average of wage changes forecast by UCLA and the Department of Finance
  - Both historic and projected wage changes are generally used without adjustment
- Industry mix adjustments
  - Historic changes: apply adjustment when measured impact is significant and atypical
  - Projected changes: apply adjustment when impact is significant AND forecast changes in industry mix appear very likely (e.g., return of restaurant employment)
- Wage level distribution adjustment
  - Historic changes: apply adjustment when appropriate survey data is available and observed wage changes are distorted for an identified reason (e.g., mass layoffs)
  - Forecast changes: no survey level forecasts are available, any potential adjustment would be used to unwind a portion of measured adjustments made to observed wage changes



#### **Average Wage**

Current forecasts of average wage changes are from March 2023 UCLA and November 2022 Department of Finance

■ The averages of these wage forecasts are:

Source	2020	2021	2022	2023	2024	2025
Average/ Observed	11.3%	7.7%	0.5%	4.3%	2.9%	2.7%
UCLA			0.5%	5.2%	2.7%	1.7%
DoF			0.5%	3.4%	3.0%	3.7%



#### Statewide Average Wage Change: 2020 and 2021

 As discussed at the March 21 meeting, staff recommends continuing to use both industry mix and wage level distribution adjustments to adjust observed wage changes for these years

Observed changes:

- 2020: 11.3%

- 2021: 7.7%

• Industry mix adjustments:

- 2020: -1.9%

- 2021: +0.5%

Wage level distribution adjustments:

- 2020: -3.9%

- 2021: -1.8%



#### **Statewide Average Wage Change: 2022**

- Staff investigated making an analogous adjustment for the observed 2022 wage change using CPS data
  - This data resulted in an overall 2022 wage change that was inconsistent with observed wage changes from other sources

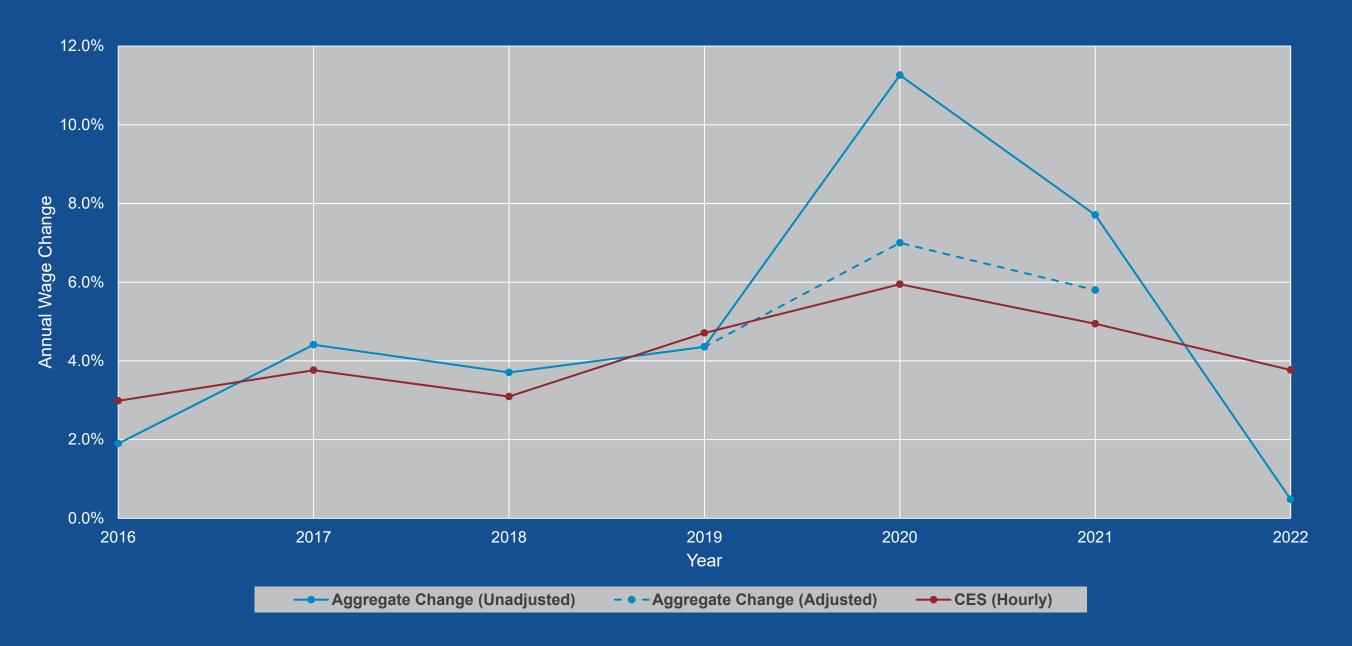
Source	2020	2021	2022
UCLA/BLS	11.2%	7.6%	0.5%
ACS/CPS	9.9%	8.1%	8.0%

- Additionally, the measured adjustment was directionally inconsistent with the small observed wage change in 2022 (i.e., the 0.5% change would be adjusted downward)
- For these reasons, staff does not recommend making this adjustment for the 2022 wage change
- Instead, staff considered using alternative historic wage series



# Impact of the Economic Slowdown on Pure Premium Rate Indications

#### **Comparison of Historic Wage Change Series**





#### Statewide Average Wage Change: 2022 Recommendation

- Staff recommends using the average of the observed aggregate change and the CES hourly wage change
  - Staff considered using the CES weekly wage series, but preferred the hourly wage series which is not distorted by changing levels of typical hours worked
  - Staff considered using only the CES wage change, but preferred to not give full confidence to either value
  - The average of these wage changes is 2.2%
- Staff recommends also applying the measured industry mix adjustment factor of +0.5%
- Staff recommends no explicit adjustment for changes in the wage level distribution
  - The incorporation of the CES data series is intended to serve this purpose



# Pure Premium Rate Indications Impact of the Economic Slowdown on

#### **Statewide Average Wage Change: 2023-2025**

• Staff recommends using the standard method of averaging the UCLA and DoF forecasts without adjustment



# Impact of the Economic Slowdown on Pure Premium Rate Indications

#### Selected and Recommended Average Wage Changes

	Filing	2020	2021	2022	2023	2024	2025
Unadjusted	9/1/2021	9.6%	0.9%	1.8%	2.8%		
	9/1/2022	11.4%	8.0%	2.7%	2.0%	2.0%	
	9/1/2023	11.3%	7.7%	2.2%	4.3%	2.9%	2.7%
Industry Mix	9/1/2021	-1.9%	0.4%				
	9/1/2022	-1.8%	0.3%	0.5%	-0.3%	-0.1%	
	9/1/2023	-1.9%	0.5%	0.5%			
Wage Level	9/1/2021	-4.3%	1.4%	1.0%	0.4%		
	9/1/2022	-3.9%	-1.8%	1.6%	1.1%	0.5%	
	9/1/2023	-3.9%	-1.8%				
Adjusted	9/1/2021	2.9%	2.8%	2.9%	3.2%		
	9/1/2022	5.1%	6.3%	4.9%	2.8%	2.5%	
	9/1/2023	4.9%	6.3%	2.7%	4.3%	2.9%	2.7%



03

Retrospective Evaluation of 2021 Fee Schedule Changes

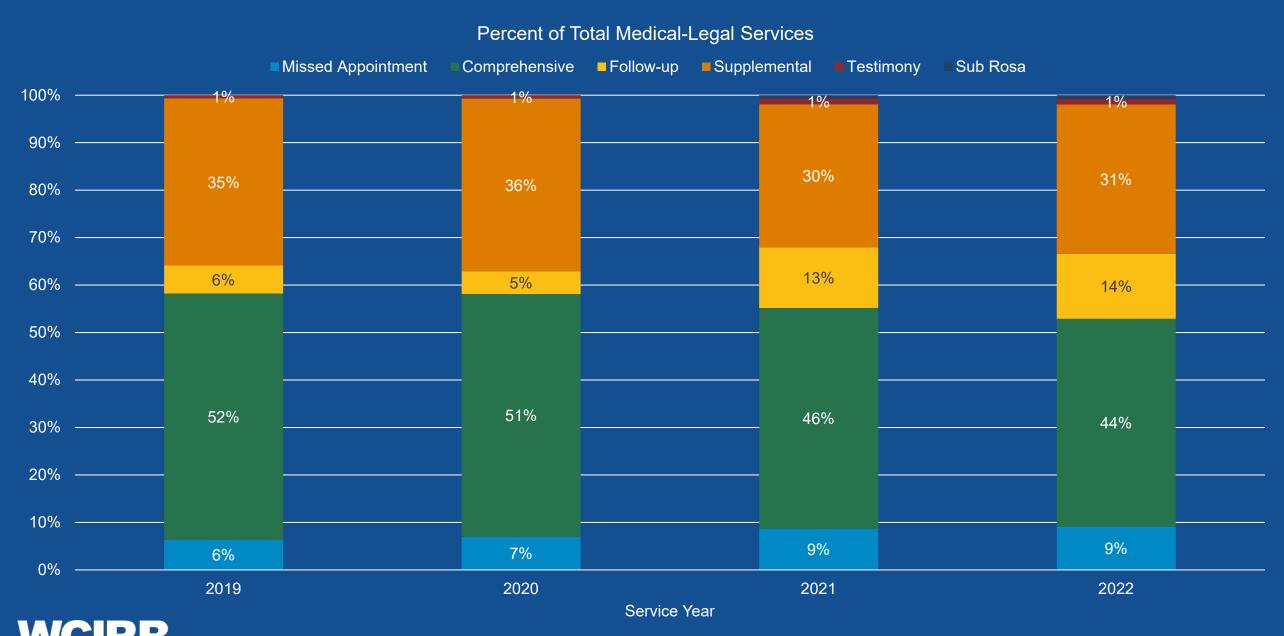


#### Background on New Medical-Legal Fee Schedule

- The Division of Workers' Compensation (DWC) adopted significant changes to the Medical-Legal (ML) Fee Schedule effective April 1, 2021.
- The new ML Fee Schedule is intended to increase the reimbursement allowance for medical-legal reports while eliminating complexity factor overlays onto reimbursement allowances.
- In April 2021, the WCIRB conducted a prospective evaluation of the cost impact of new ML Fee Schedule and estimated an increase of 22% to the medical-legal costs. The cost impact was reflected in the September 1, 2021 Pure Premium Rate Filing.
- In April 2022, the WCIRB analyzed the actual payments in 2021 and found that the new ML Fee Schedule led to a 39% increase in the average ML payment per claim in 2021 compared to 2019, mostly driven by higher-than-projected costs for reviewing additional pages of records. The updated cost impact was reflected in the September 1, 2022 Pure Premium Rate Filing.
- Staff has reviewed available data of 2021 and 2022 to update the retrospective evaluation of the cost impact of the new ML Fee Schedule.



#### Distribution of Medical-Legal (ML) Services (Q2 through Q4)



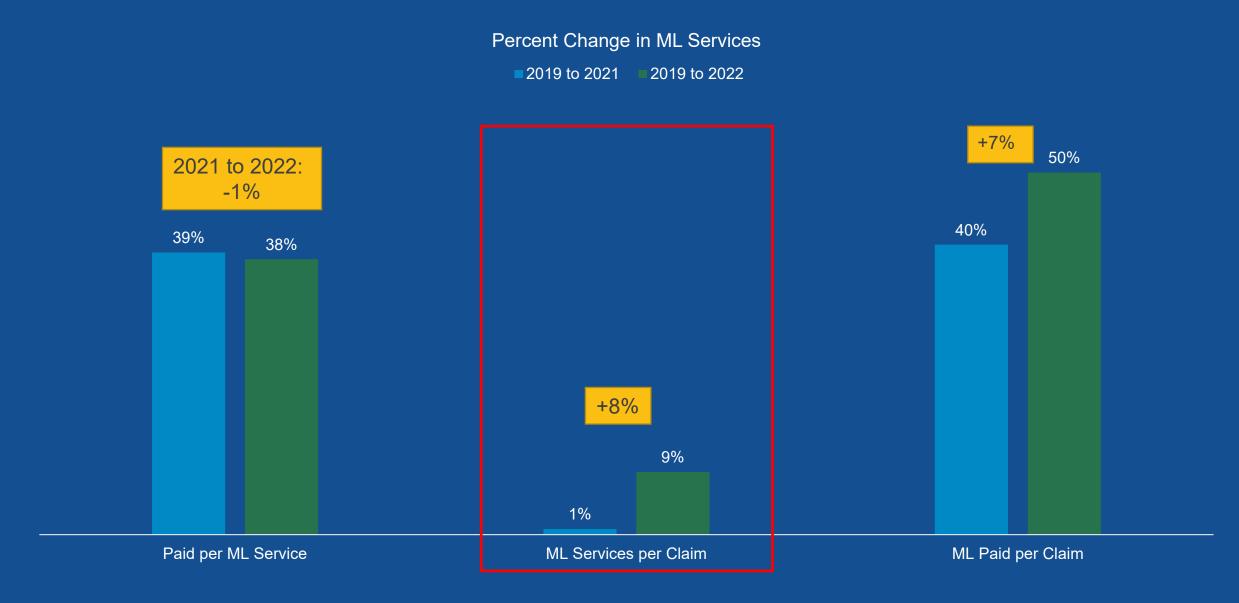
#### **Share of Claims with ML Services**





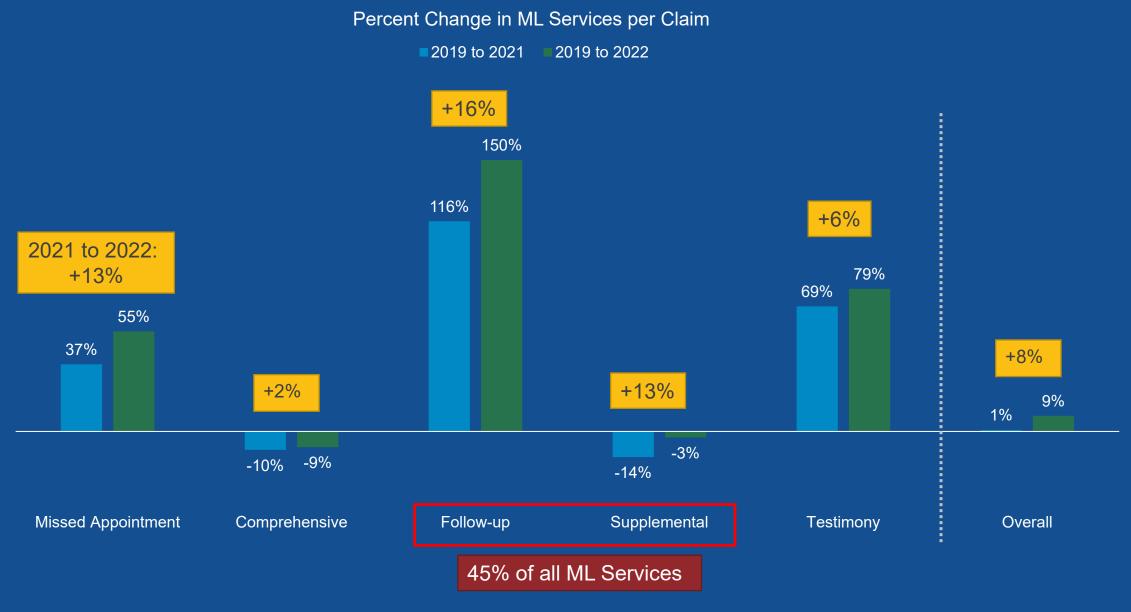


# Changes in Payments and Utilization of Medical-Legal (ML) Services (Q2 through Q4)





# Percent Change in Number of ML Services per Claim by Types of ML Service (Q2 through Q4)

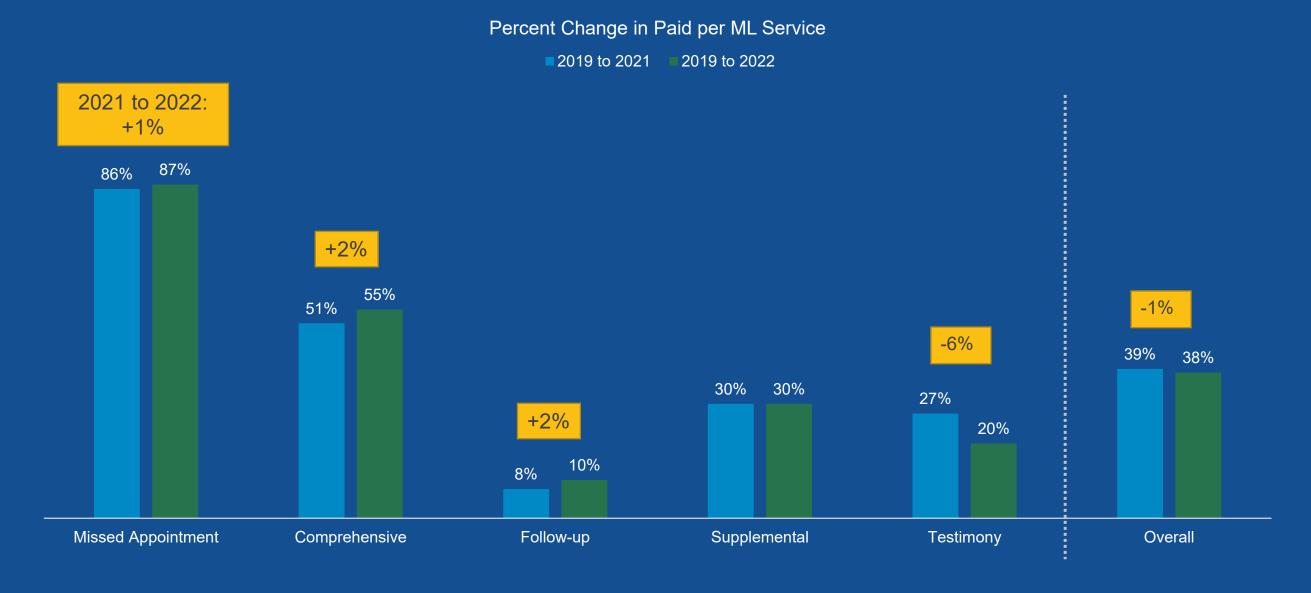




<sup>\*</sup> Payments for record review of additional pages were included in the payments for ML services. The number in the yellow textbox represents the percentage change comparing 2022 to 2021.

Source: WCIRB medical transaction data (COVID-19 claims excluded)

### Changes in Paid per ML Service by Types of ML Service (2019 through 2022)

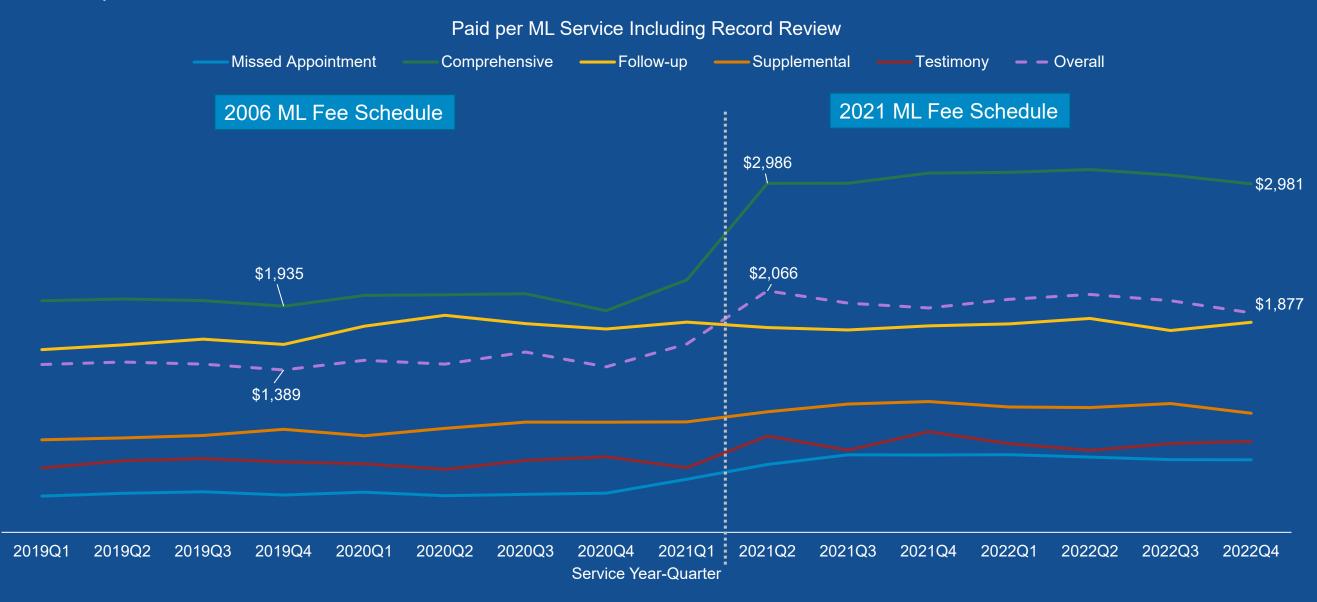




<sup>\*</sup> Payments for record review of additional pages were included in the payments for ML services. The number in the yellow textbox represents the percentage change comparing 2022 to 2021.

Source: WCIRB medical transaction data (COVID-19 claims excluded)

## Quarterly Trend of Average Payment for ML Services including Record Review





#### Percent Change in ML Services per Claim

As of February 07, 2023

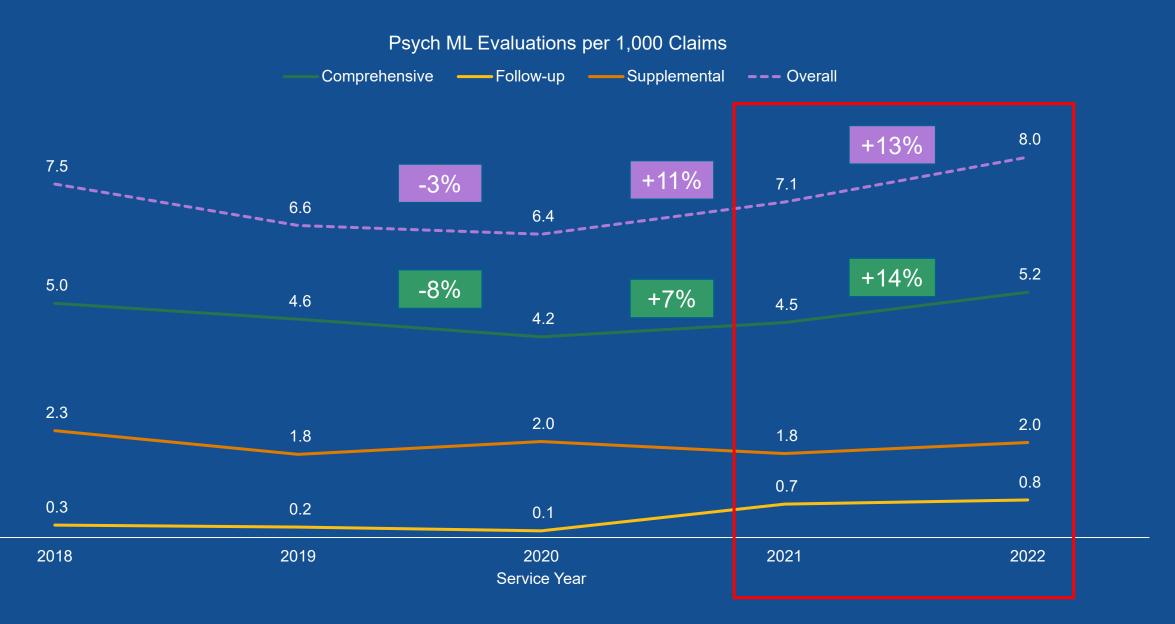
Percent Change in Number of ML Services per Claim Comparing Current Quarter to Same Quarter of the Comparison Year







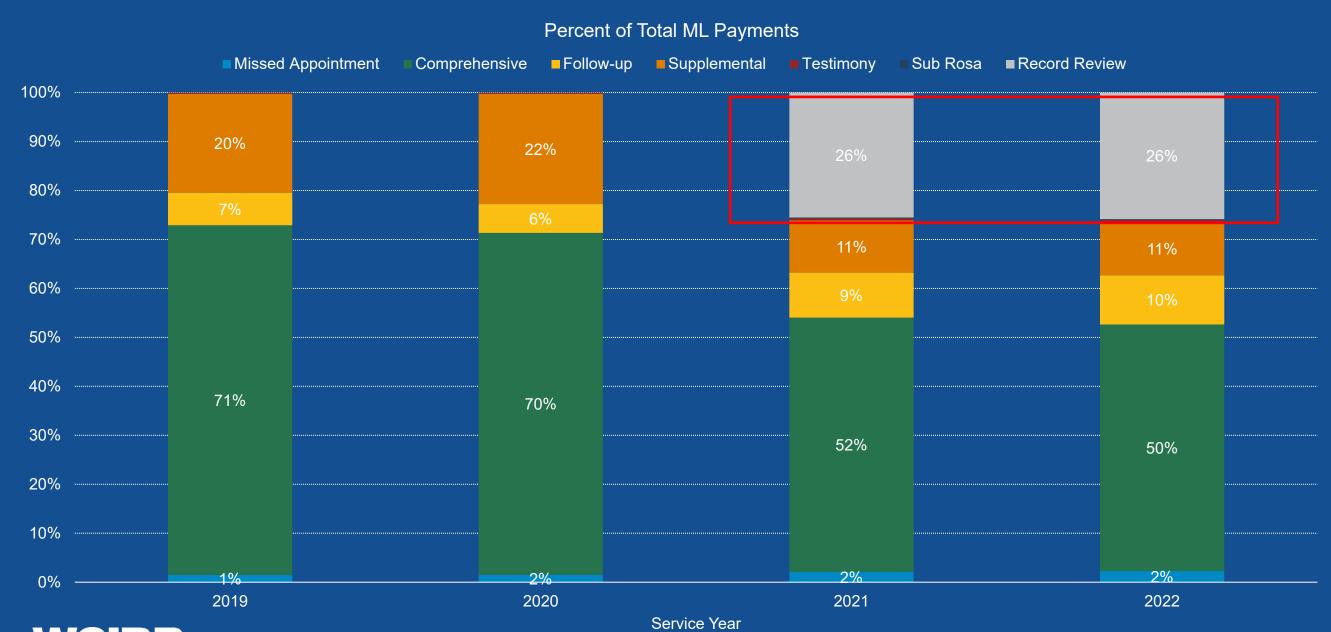
# Number of Psychological/Psychiatric ML Evaluations Per 1,000 Claims (Q2 through Q4)





#### Distribution of Payments for ML Services (Q2 through Q4)

(7.6% of payments for all 2021 medical services)



### Record Review of Additional Pages\* (Q2 through Q4 in 2021 and 2022)

As of February 07, 2023

	SY2021			SY2022		
	Share of ML Services with Additional Pages	Pages per Record	Average Paid Per Record Review	Share of ML Services with Additional Pages	Pages per Record	Average Paid Per Record Review
Missed Appointment	6%	707	\$2,122	7%	596	\$1,788
Comprehensive	42%	590	\$1,769	44%	582	\$1,745
Follow-up	23%	422	\$1,265	25%	426	\$1,278
Supplemental	28%	426	\$1,279	31%	410	\$1,230
Overall	32%	532	\$1,596	33%	514	\$1,541



### Comparison of Actual and Projected Cost Impact of New Medical-Legal Fee Schedule – Preliminary Findings

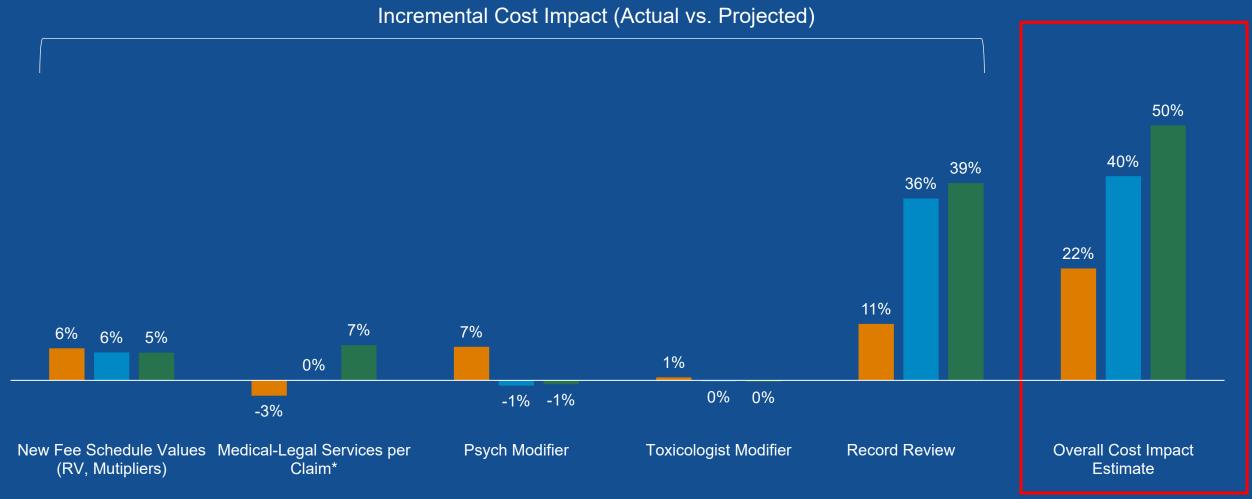
As of February 07, 2023

Comparison of Percentage Change in Actual Paid per Claim and in Estimated Paid per Claim

Actual 2019 to Projected 2021

Actual 2019 to Actual 2021

Actual 2019 to Actual 2022





<sup>\*</sup>The 2021 projection has an assumption of a lower frequency for supplemental ML evaluations. The number in the yellow textbox represents the percentage change comparing 2022 to 2021.

Source: WCIRB medical transaction data (COVID-19 claims excluded)

### **Summary of Key Preliminary Findings**

- During the second year (2022) of the new ML Fee Schedule, ML payments per claim continued to increase:
  - 7% higher than 2021, 50% higher than 2019
- Record review continued to be a key cost driver
  - 26% of all ML payments in both 2021 and 2022
  - Including record review, paid per ML service in 2022 remained at a high level similar to 2021
    - 38% higher than 2019
- Number of ML services per claim started to increase in 2022
  - 8% higher than 2021, 9% higher than 2019
  - The increase is concentrated in follow-up and supplemental evaluations and in psychiatric evaluations
  - The increase in the number of ML services per claim is likely related to the structure of the new fee schedule
- Staff recommends reflecting the 50% increase to the ML costs in the September 1, 2023 Pure Premium Rating Filing.



04

Study of Paid and Incurred Loss Development



The analysis is a continuation of the paid and incurred development study presented at the December 2022 meeting. The updated analysis includes the following based on the discussion in December:

- Reviewing more mature development periods in addition to those of the prior study that capped at 96 months
- Considering the adjusted paid methods to account for reforms and claim settlement rate impacts
- Including data through December 31, 2022
- Reviewing other criteria in selecting loss development methodology
  - Stability of age-to-age development and projections
  - Variability across insurers
  - Recent divergence in paid and incurred loss ratio projections



### Early Period Retrospective Analysis – Indemnity Results (Exh 1 & 2)

Data as of December 31, 2022

The unadjusted latest year incurred method and the latest year paid with settlement adjustment generally show smaller root mean square error (rMSE) between actual and expected across accident years and development ages reviewed.

		Indemnity rMSE by Development Month Age							
Development Methods	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	12-108m Avg
Latest Year Incurred	0.009	0.010	0.011	0.007	0.007	0.006	0.007	0.006	0.008
3-Year Avg. Incurred	0.012	0.013	0.014	0.011	0.010	0.008	0.008	0.007	0.011
5-Year Excl. Hi-Lo Incurred	0.018	0.019	0.018	0.014	0.013	0.010	0.010	0.008	0.014
Latest Year Paid	0.017	0.017	0.014	0.012	0.014	0.010	0.011	0.010	0.013
3-Year Avg. Paid	0.025	0.023	0.018	0.017	0.018	0.013	0.013	0.012	0.018
5-Year Excl. Hi-Lo Paid	0.026	0.024	0.021	0.021	0.022	0.016	0.015	0.012	0.020
Latest Yr Paid Adj Settlement	0.015	0.013	0.005	0.004	0.007	0.005			0.009

		Indemnity rMSE by Accident Year					
Development Methods	2014	2015	2016	2017	2018	2019	2014-2019 Avg
Latest Year Incurred	0.008	0.008	0.011	0.010	0.008	0.005	0.008
3-Year Avg. Incurred	0.008	0.011	0.012	0.016	0.017	0.008	0.012
5-Year Excl. Hi-Lo Incurred	0.012	0.014	0.017	0.019	0.021	0.012	0.016
Latest Year Paid	0.013	0.012	0.017	0.016	0.016	0.011	0.014
3-Year Avg. Paid	0.015	0.017	0.017	0.022	0.028	0.021	0.021
5-Year Excl. Hi-Lo Paid	0.017	0.019	0.021	0.022	0.031	0.028	0.024
Latest Yr Paid Adj Settlement	0.011	0.008	0.008	0.006	0.012	0.010	0.009



### Early Period Retrospective Analysis – Medical Results (Exh 1 & 2)

Data as of December 31, 2022

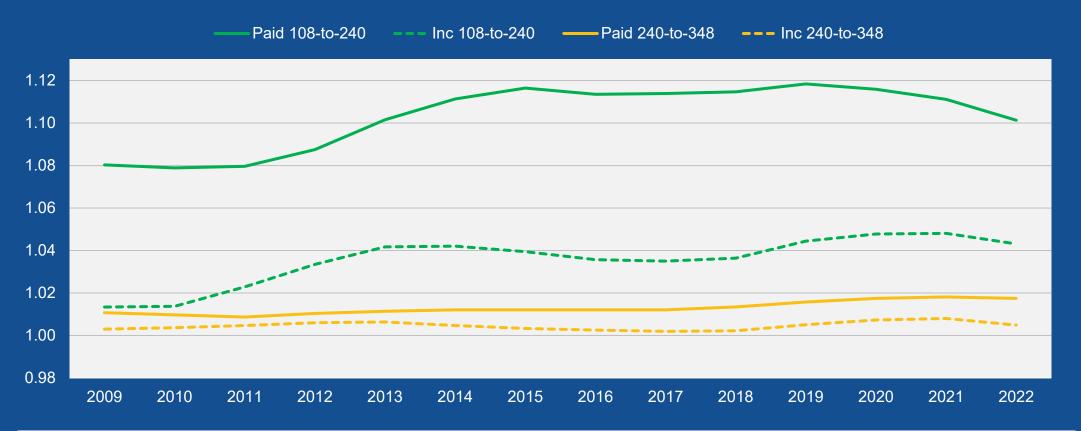
The unadjusted latest year incurred method and the latest year paid with settlement adjustment generally show smaller root mean square error (rMSE) between actual and expected across accident years and development ages reviewed.

		Medical rMSE by Development Month Age							
Development Methods	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	12-108m Avg
Latest Year Incurred	0.015	0.013	0.016	0.012	0.009	0.009	0.008	0.004	0.011
3-Year Avg. Incurred	0.031	0.024	0.025	0.020	0.014	0.014	0.012	0.007	0.020
5-Year Excl. Hi-Lo Incurred	0.046	0.037	0.034	0.028	0.021	0.019	0.016	0.010	0.029
Latest Year Paid	0.016	0.020	0.019	0.016	0.013	0.011	0.010	0.010	0.015
3-Year Avg. Paid	0.025	0.025	0.024	0.023	0.019	0.015	0.014	0.013	0.020
5-Year Excl. Hi-Lo Paid	0.031	0.027	0.027	0.028	0.023	0.018	0.016	0.014	0.024
Latest Yr Paid Adj Reform	0.017	0.017	0.019	0.014	0.013	0.009	0.013	0.012	0.014
Latest Yr Paid Adj Settlement*	0.017	0.015	0.013	0.011	0.009	0.008			0.013

		Medical rMSE by Accident Year					
Development Methods	2014	2015	2016	2017	2018	2019	2014-2019 Avg
Latest Year Incurred	0.015	0.013	0.014	0.015	0.005	0.008	0.012
3-Year Avg. Incurred	0.030	0.025	0.022	0.023	0.015	0.005	0.021
5-Year Excl. Hi-Lo Incurred	0.036	0.036	0.034	0.033	0.026	0.011	0.031
Latest Year Paid	0.013	0.015	0.020	0.022	0.005	0.022	0.017
3-Year Avg. Paid	0.016	0.019	0.024	0.033	0.023	0.020	0.023
5-Year Excl. Hi-Lo Paid	0.015	0.021	0.030	0.040	0.035	0.018	0.028
Latest Yr Paid Adj Reform	0.015	0.014	0.017	0.017	0.007	0.024	0.016
Latest Yr Paid Adj Settlement*	0.011	0.012	0.015	0.018	0.005	0.018	0.014



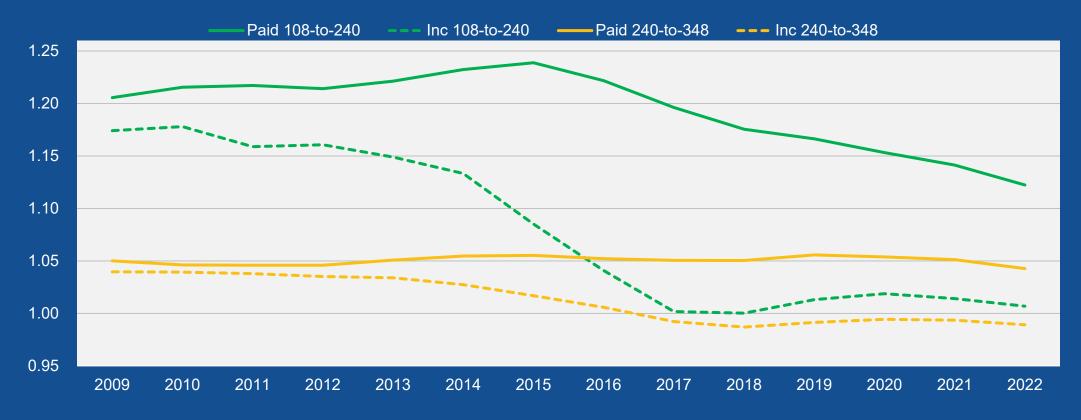
### **Comparison of Later Period Development – Indemnity Results (Exh 3)**



	108-to-240	240-to-348	348-Ultimate
Paid CV	0.014	0.003	0.002
Incurred CV	0.011	0.002	0.002
Paid rMSE	0.58%	0.11%	0.12%
Incurred rMSE	0.53%	0.16%	0.10%



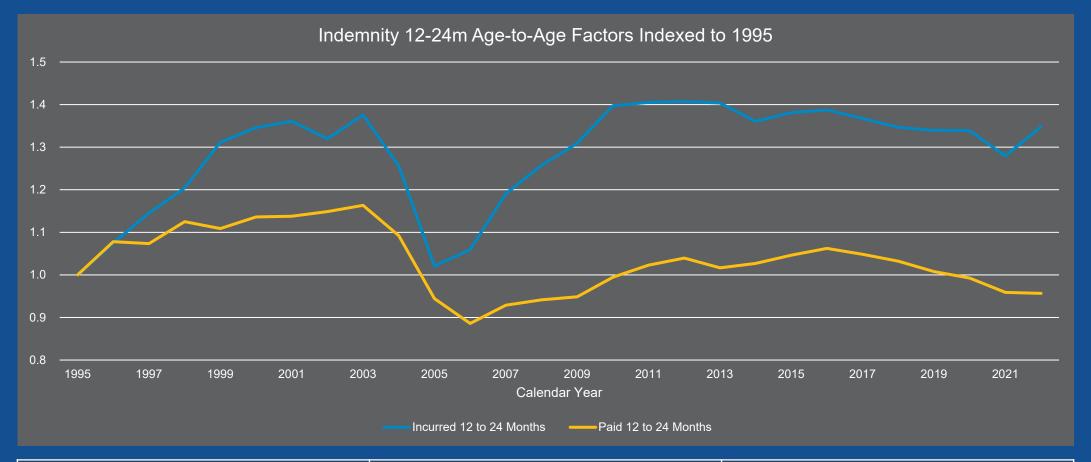
### **Comparison of Later Period Development – Medical Results (Exh 3)**



	108-to-240	240-to-348	348-Ultimate
Paid CV	0.030	0.004	0.015
Incurred CV	0.068	0.021	0.017
Paid rMSE	1.15%	0.35%	1.25%
Incurred rMSE	2.10%	0.64%	1.28%



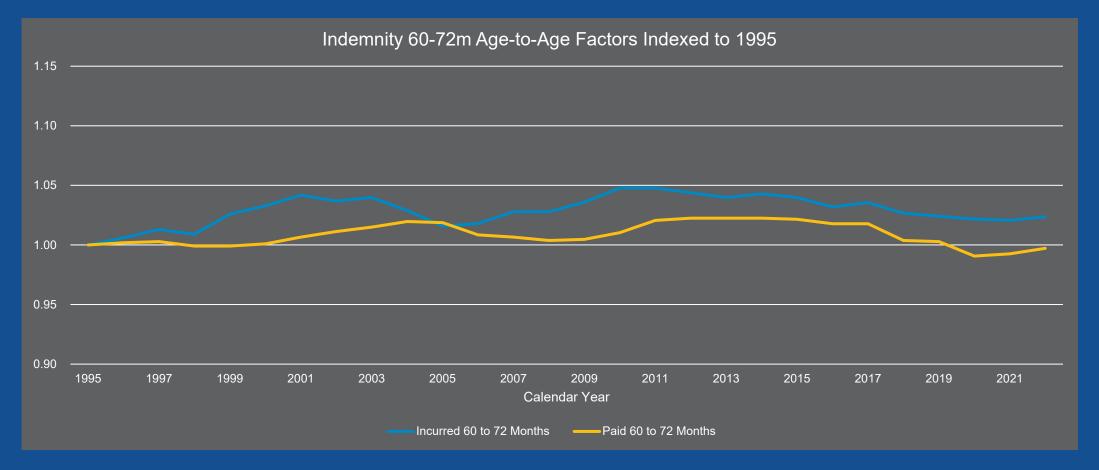
### Stability of age-to-age factors – Indemnity (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.095	0.071
2014 – 2022	0.023	0.038



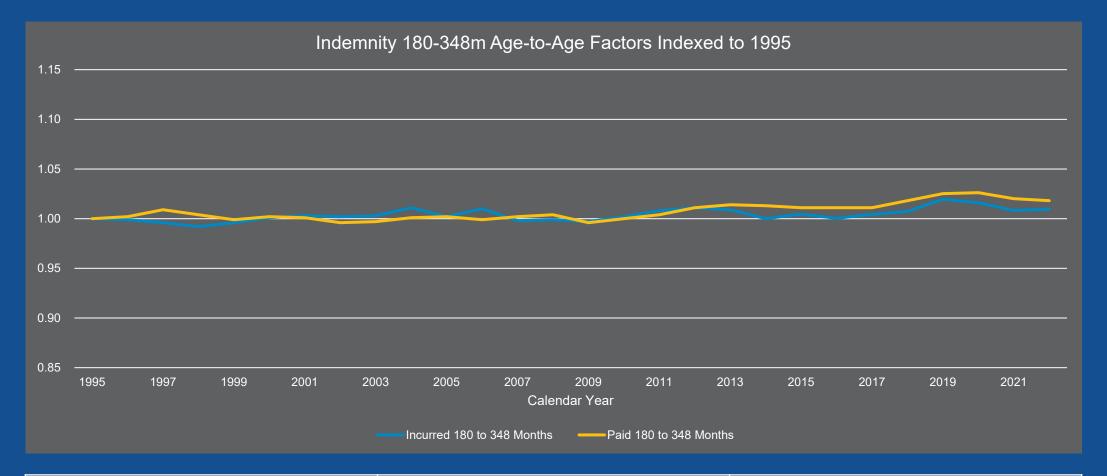
### Stability of age-to-age factors – Indemnity (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.012	0.010
2014 – 2022	0.008	0.013



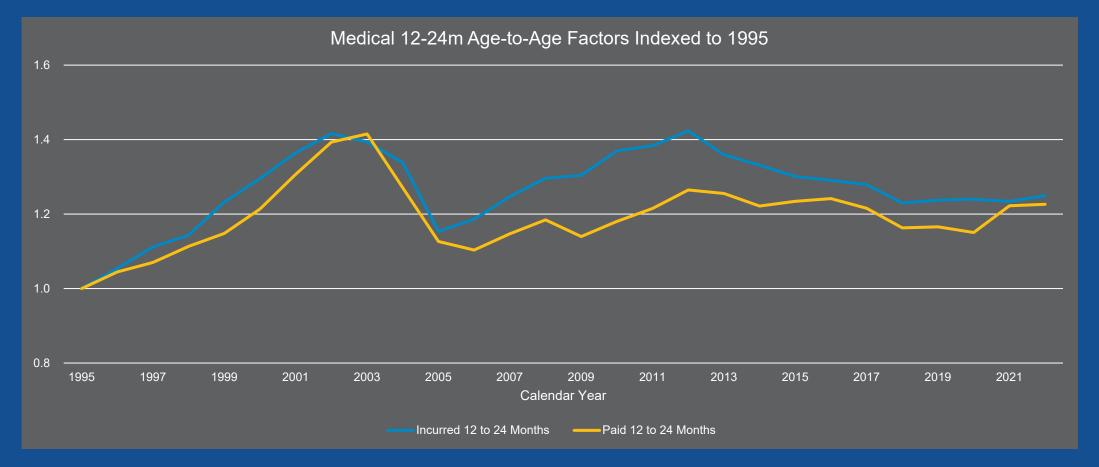
### Stability of age-to-age factors – Indemnity (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.006	0.009
2014 – 2022	0.007	0.006



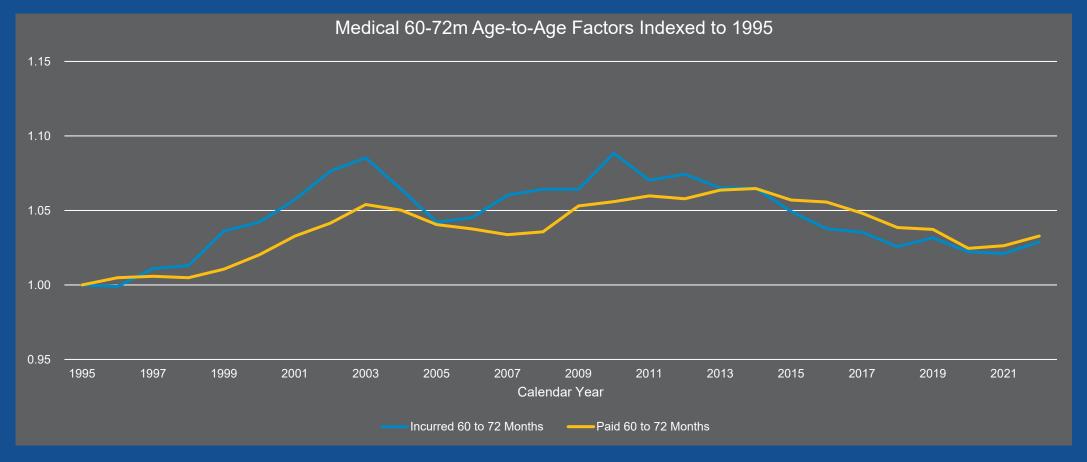
### Stability of age-to-age factors – Medical (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.083	0.077
2014 – 2022	0.028	0.029



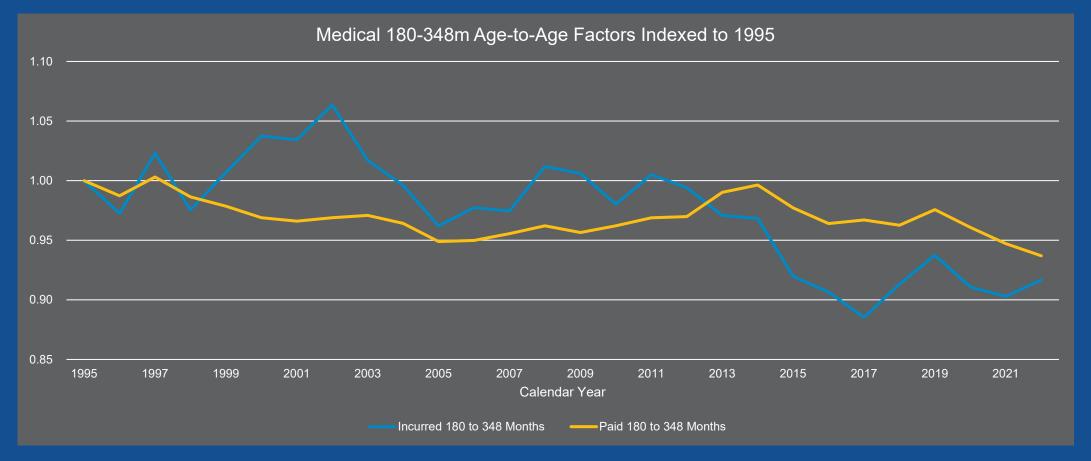
### Stability of age-to-age factors – Medical (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.024	0.019
2014 – 2022	0.014	0.014



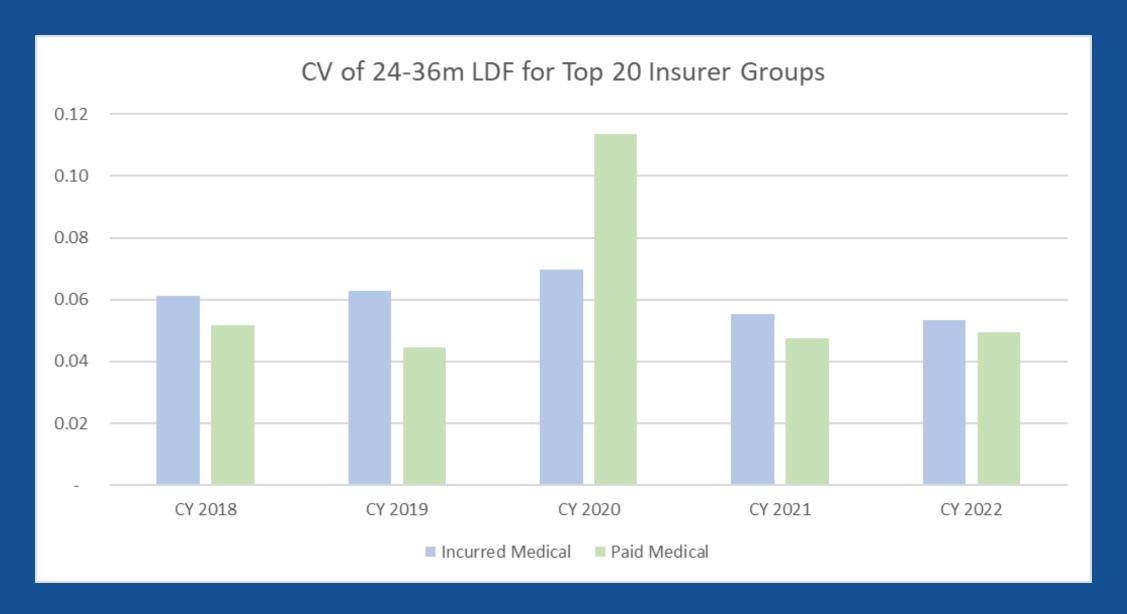
### Stability of age-to-age factors – Medical (Exh 4 & 5)



CV	Incurred	Paid
1995 – 2022	0.048	0.017
2014 – 2022	0.026	0.018



### Variability of age-to-age factors – Medical (Exh 6)



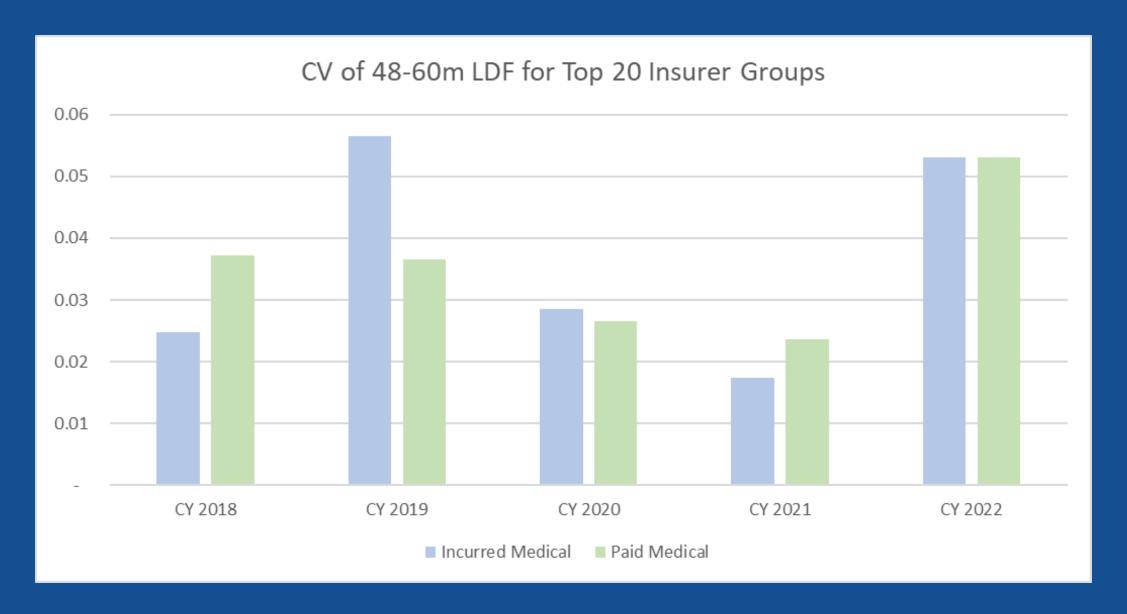






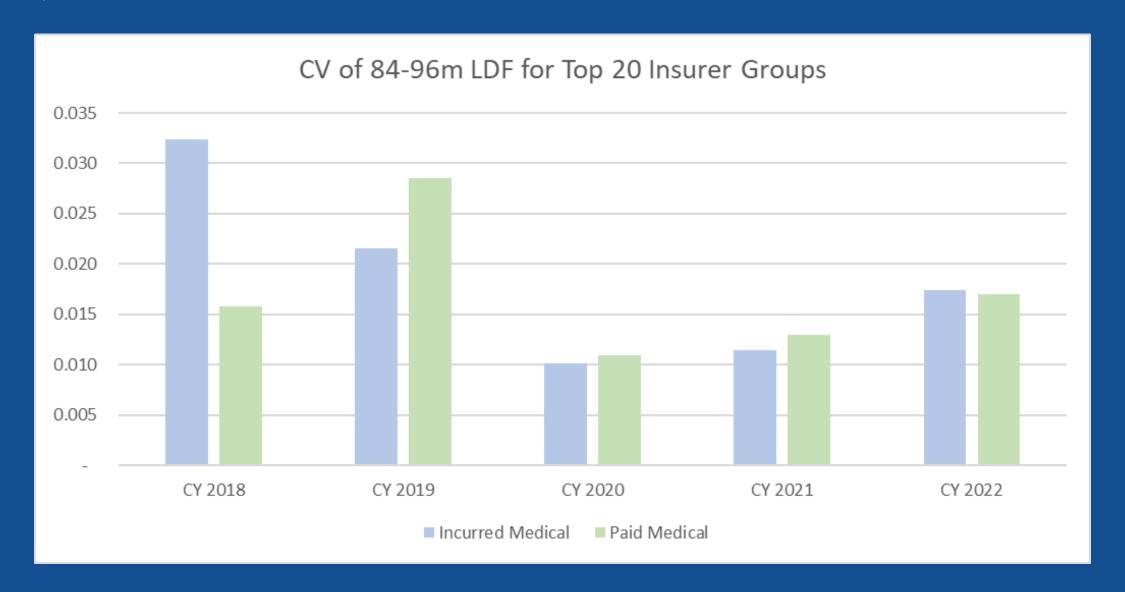


### Variability of age-to-age factors – Medical (Exh 6)





### Variability of age-to-age factors – Medical (Exh 6)





### Variability of Age-to-Age Factors Among Top 20 Insurer Groups - Medical (Exh 6)

Data as of December 31, 2022

### Component with Lower CV

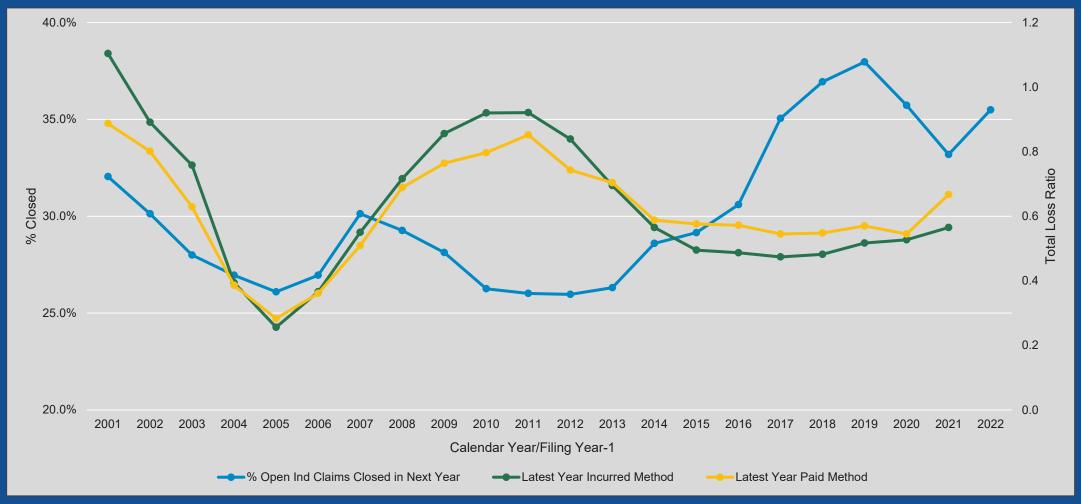
Age	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	Average
12-24	Incurred	Incurred	Paid	Paid	Paid	Incurred
24-36	Paid	Paid	Incurred	Paid	Paid	Incurred
36-48	Incurred	Paid	Incurred	Incurred	Paid	Incurred
48-60	Incurred	Paid	Paid	Incurred	Paid	Paid
60-72	Paid	Incurred	Incurred	Incurred	Incurred	Paid
72-84	Paid	Paid	Incurred	Paid	Paid	Paid
84-96	Paid	Incurred	Incurred	Incurred	Paid	Paid
96-120	Paid	Paid	Paid	Incurred	Paid	Paid

Incurred lower: 42.5%

• Paid lower: 57.5%

• The average CV for each development period from 48 months through 120 months is lower for paid development.

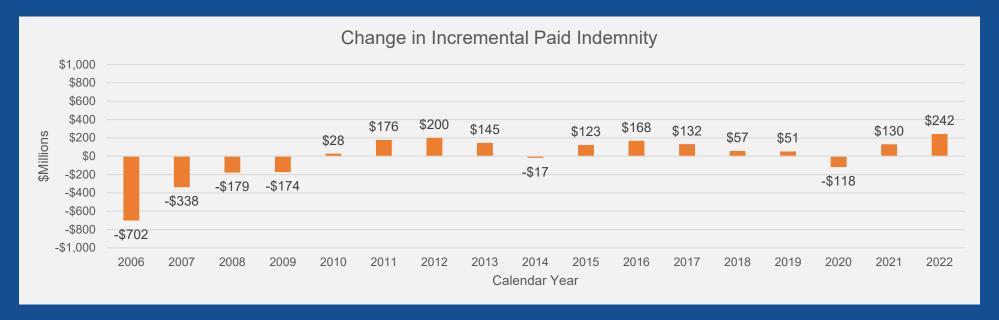
### Correlation of Settlement Ratio Changes and Projected Loss Ratios (Exh 7)

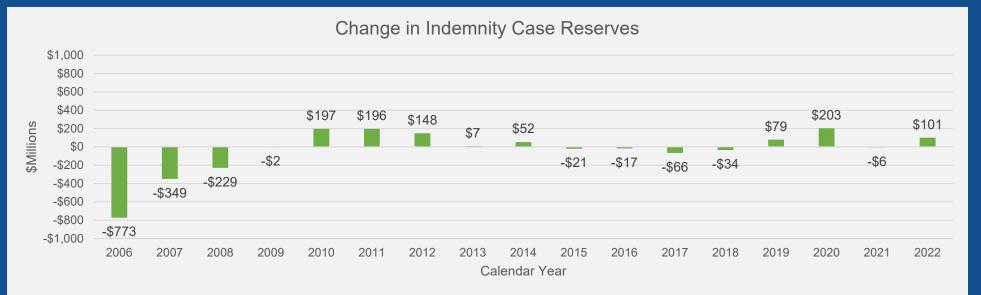


Correlation of Claim Settlement Rate with:	All Years	2005+	2013+
Incurred Development Loss Ratio:	-0.208	-0.385	-0.605
Paid Development Loss Ratio:	-0.071	-0.215	-0.601



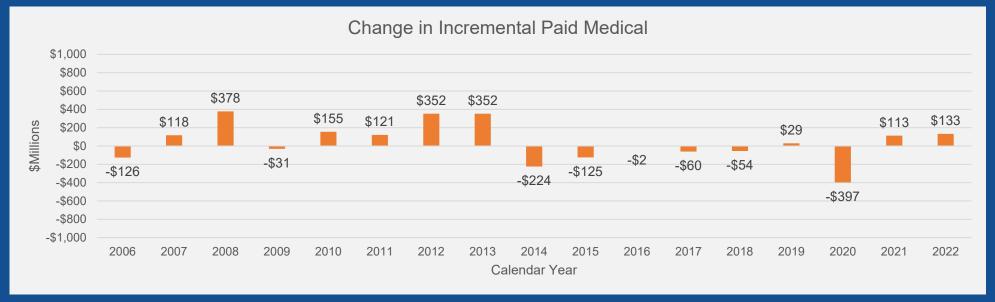
### Change in Incremental Paid Indemnity and Indemnity Case Reserves (Exh 8.1)

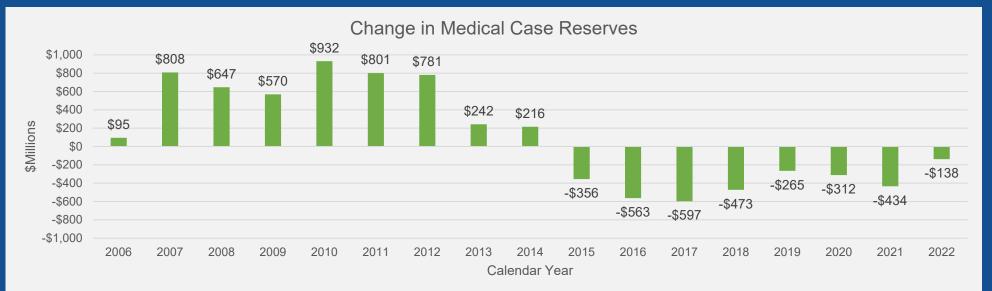




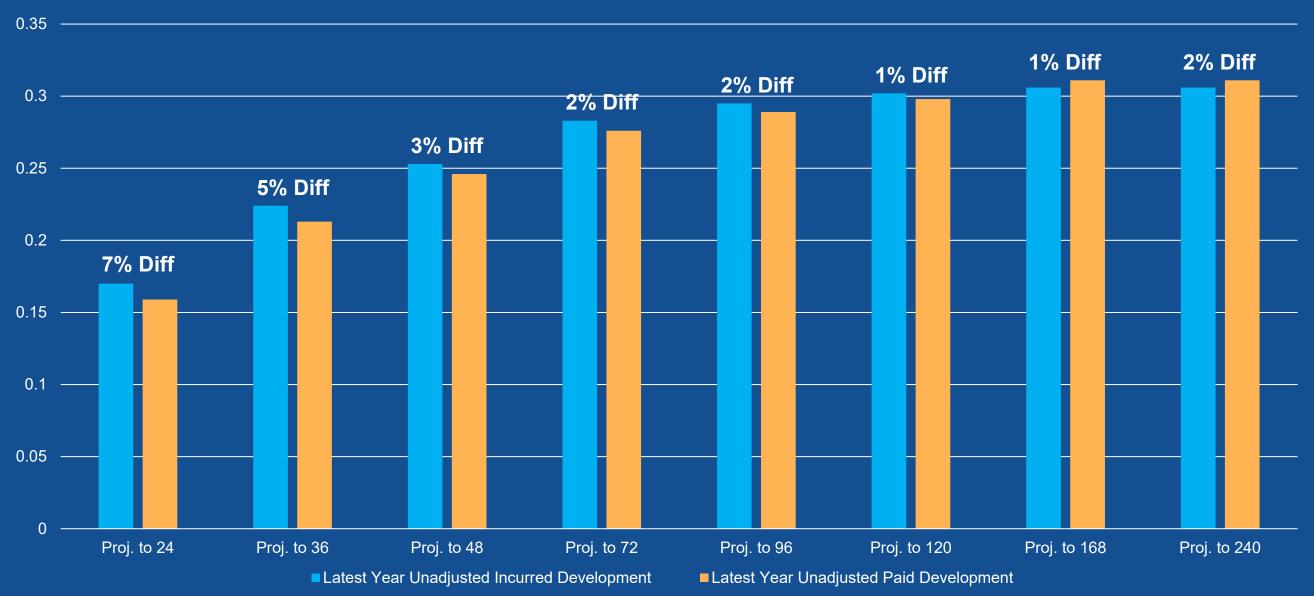


### Change in Incremental Paid Medical and Medical Case Reserves (Exh 8.2)



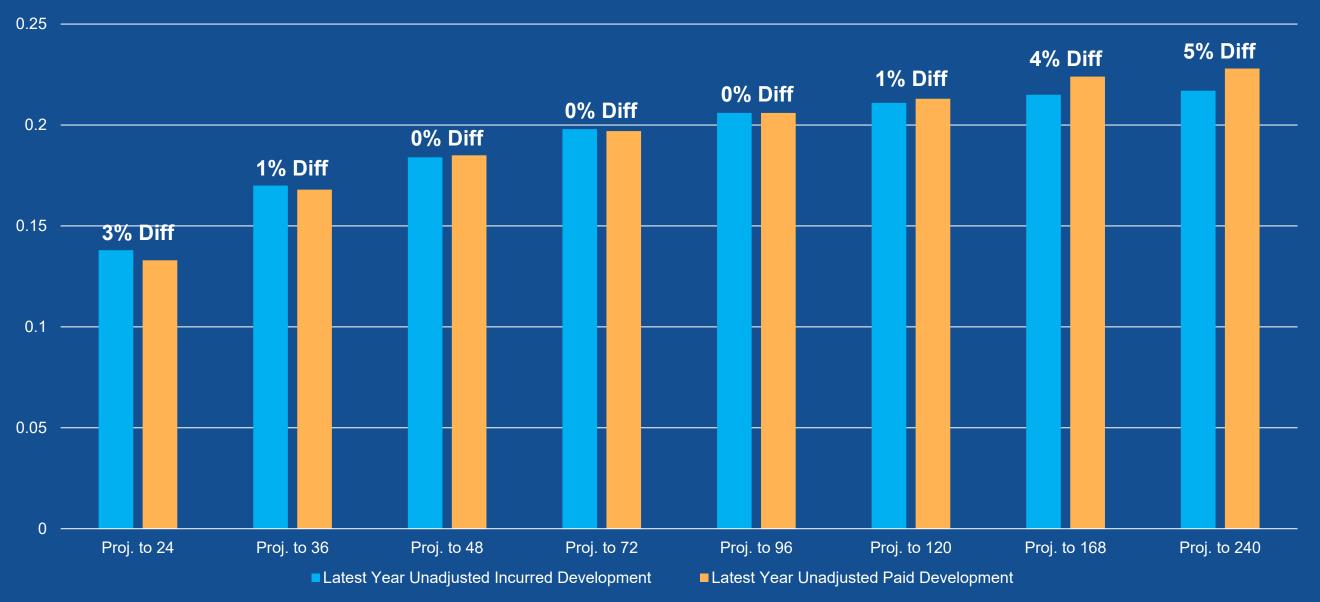


### Difference Between Paid and Incurred Loss Ratio Projections – Indemnity AY 2010 (Exh 9)





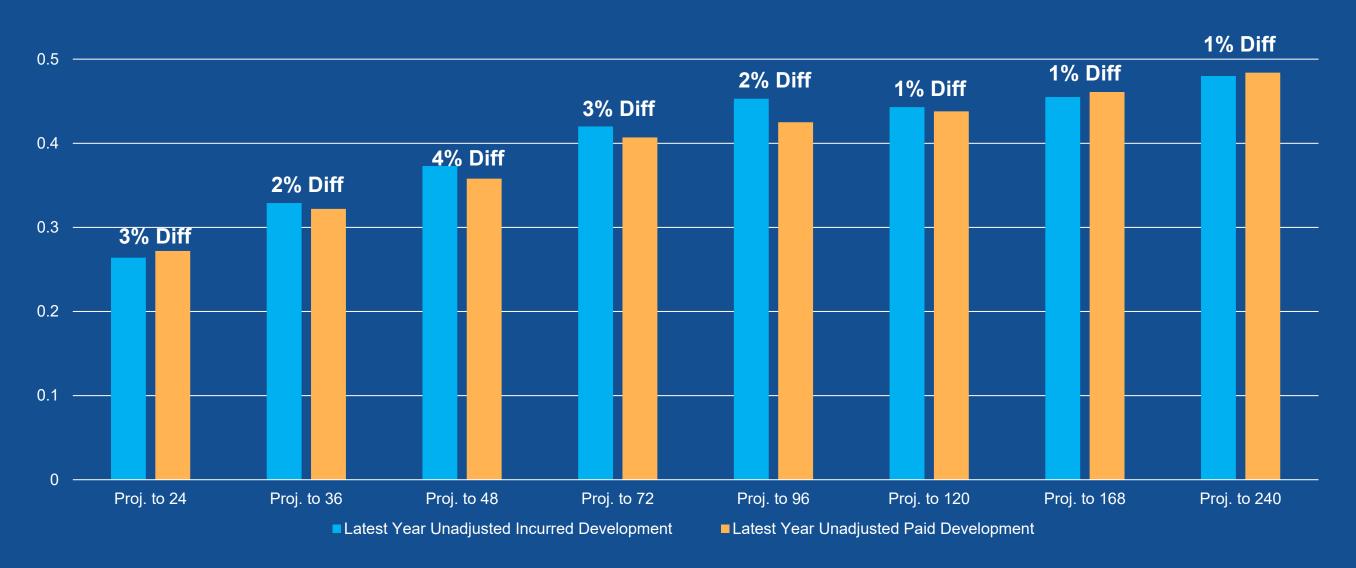
### Difference Between Paid and Incurred Loss Ratio Projections – Indemnity AY 2018 (Exh 9)





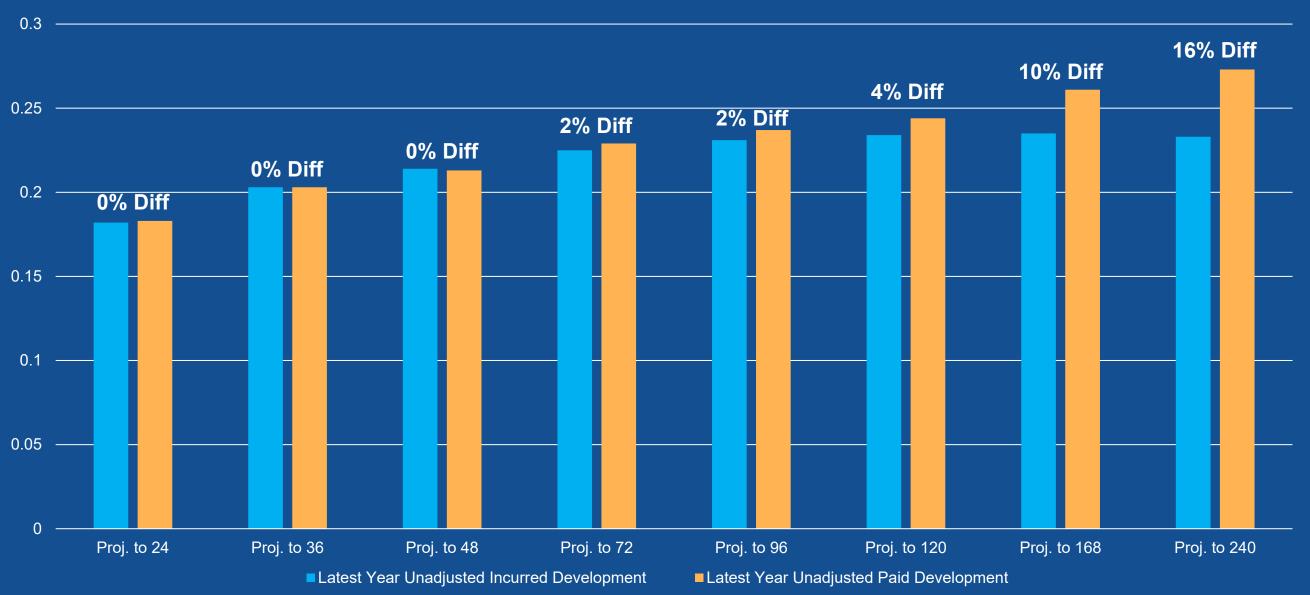
### Difference Between Paid and Incurred Loss Ratio Projections – Medical AY 2010 (Exh 9)







### Difference Between Paid and Incurred Loss Ratio Projections – Medical AY 2018 (Exh 9)





### Study of Paid and Incurred Development – Summary

- Adjusted paid development continues to be a reliable basis to project future loss development
- Latest year incurred and adjusted paid methods show comparable accuracy at earlier maturities
- Incurred development projections are more volatile at later maturities
  - Incurred development continues to be impacted by reforms, claim settlement rate increases, and declines in pharmaceutical costs in later period development
  - These impacts are more quickly realized in paid development and can be more consistently adjusted for when they cause distortions



### 05

First Quarter 2023
Review of
Diagnostics



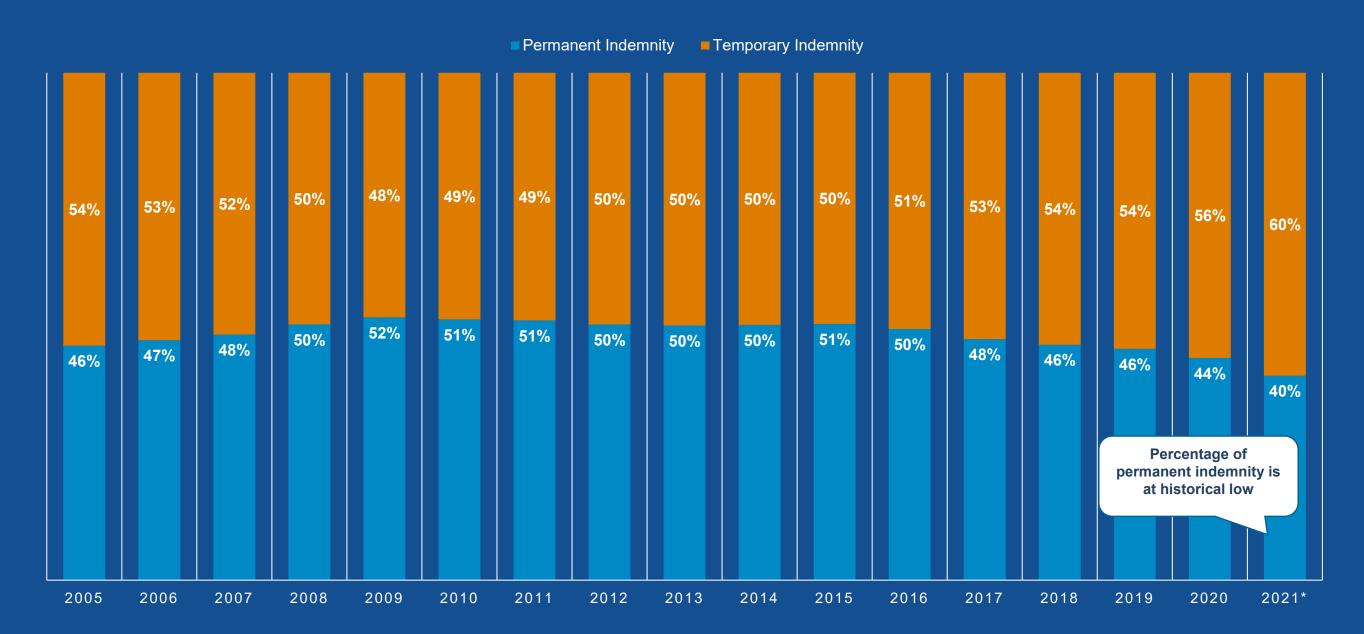
### Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims (Exhibit C3.1)





### First Quarter 2023 Review of Diagnostics

### Distribution of Estimated Ultimate Number of Indemnity Claims by Injury Type (Exhibit M4)



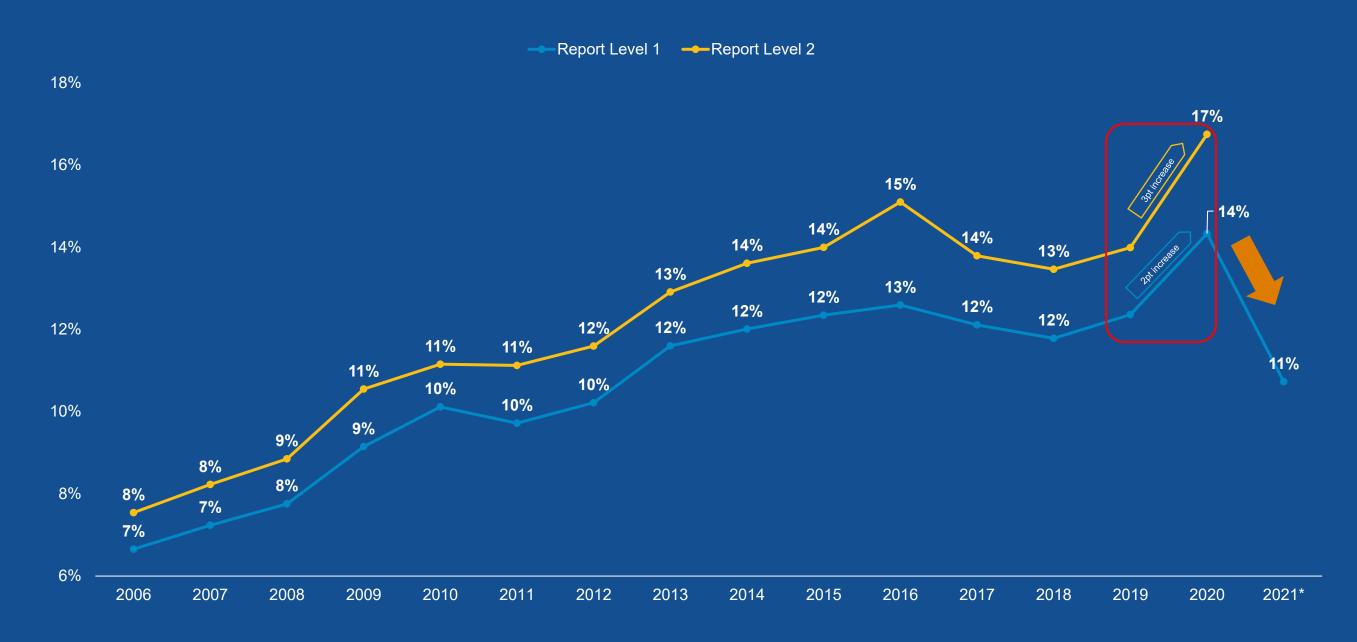


### **Ultimate Indemnity Severity Trend (Exhibit S8)**





### **Cumulative Injury Share of Total Indemnity Claim Count (Exhibit C15)**





06

12/31/2022 Experience Review



### Updated Summary of 12/31/2022 Experience (Excluding COVID-19 Claims)

- 99% of market included
- Updates from 3/21/2023 meeting review:
  - Additional insurer data submissions and revisions
  - Updated indemnity on-level adjustments based on actual unit statistical data
  - Premiums are on-leveled to the approved 9/1/2022 advisory pure premium rate level
  - Premiums for 2020 to 2022 adjusted for impact of pandemic slowdown on audits based on 3/1/2023 meeting discussion
  - Projected changes in average wages and claim frequency trends based on March 2023 UCLA data and 3/21/2023 meeting discussion
  - Does not reflect the updated retrospective evaluation of the 2021 Medical-Legal Fee Schedule changes
- Projected loss ratio using 4/13/2023 Agenda preliminary methodologies is 0.756
  - Compares to 0.798 for 9/1/2022 Filing and 0.736 reviewed at 3/21/2023 meeting



### **Approximate Percentage Point Change in Loss Ratio Projection**

Factor	Change in From 9/1/2022 Filing	
Loss Development Projection	-1.0	
Updated Wage Level Forecast	0.5	
Updated Frequency Trends	-1.5	
Replace 2019 with 2022 in Trending	-1.0	
Trend Wage and Losses to 9/1/2023 Policy Period	-1.0	
Total to 4/13/2023 Agenda	-4.0	

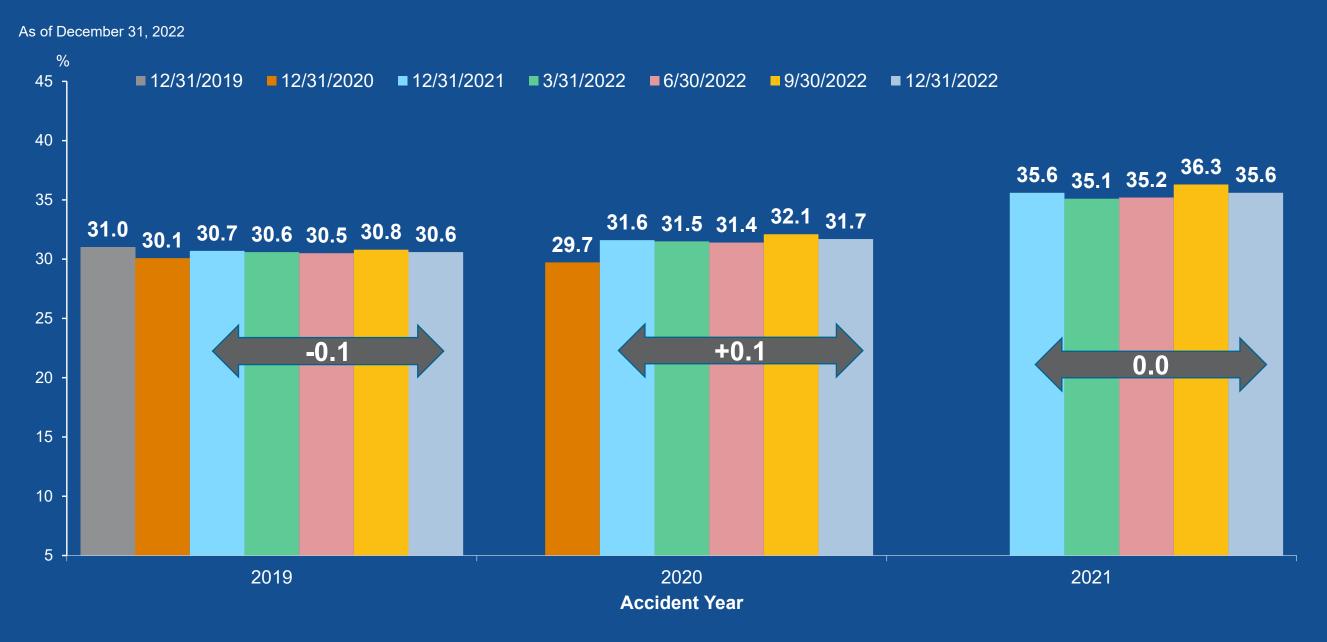


### **Developed Indemnity Loss Ratios (Exhibit 3.1)**





### **Developed Medical Loss Ratios (Exhibit 3.2)**





### Alternative Loss Development Methodologies (Item AC23-04-02) Incurred Methods

- Unadjusted Incurred Projections
  - Best with stable case reserve levels and incurred patterns
  - Can be distorted by changing reserve levels, reforms, and claim settlement rate changes
  - ★ Incurred development more volatile and cyclical than paid development, particularly at later maturities
  - Greater variability across insurers than paid method
  - ★ Difficult to impute reform and claim settlement adjustments
  - ★ Recent retrospective study showed latest year incurred development as accurate as adjusted paid method for early maturities but less accurate and more volatile in the later maturities partially due to reform and claim settlement impacts
  - ★ Incurred projections continue to be well below paid projections
- Incurred Adjusted for Changes in Case Reserve Levels
  - Best with clear evidence of changing case reserve levels
  - Unclear how to impute reform impacts
  - ★ Method can be very volatile with constantly shifting reserve levels and claim settlement rate changes (3-year average is used)

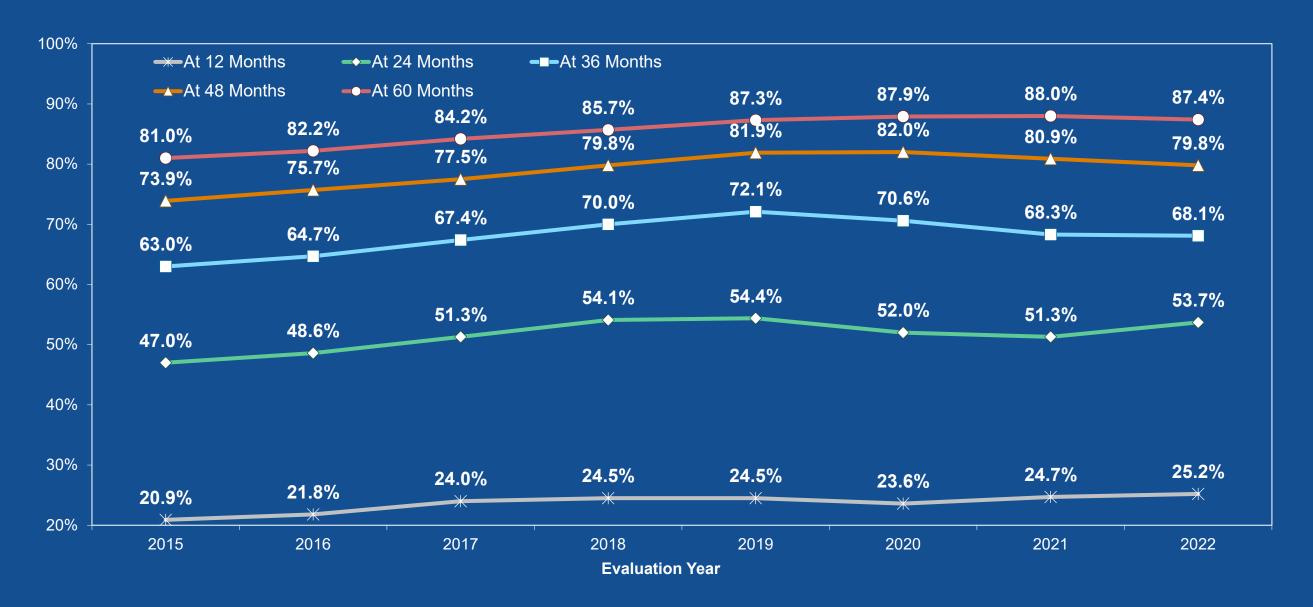


### Alternative Loss Development Methodologies (Item AC23-04-02) Paid Methods

- Unadjusted Paid Projections
  - Best with stable payment patterns
  - Can be distorted by changing settlement rates or reforms
  - ★ More stable than incurred development particularly for later maturity medical development
  - ★ Recent retrospective study showed adjusted paid method more accurate than unadjusted method
- Reform-Adjusted Paid
  - Best with clear evidence of reform impact on payment patterns
  - ★ Adjustments for SB 1160 (liens) and pharmaceutical cost changes reviewed in December 2021
  - ★ Adjustments for 2021 medical fee schedule changes account for date-of-service nature of changes
- Claim Settlement Rate-Adjusted Paid
  - Best with clear evidence of changes in claim settlement rates affecting loss development
  - Improved projection during periods of significant settlement rate change
  - ★ Outperformed unadjusted method in recent retrospective review
  - ★ Claim settlement rates have moderated after pandemic slowdown

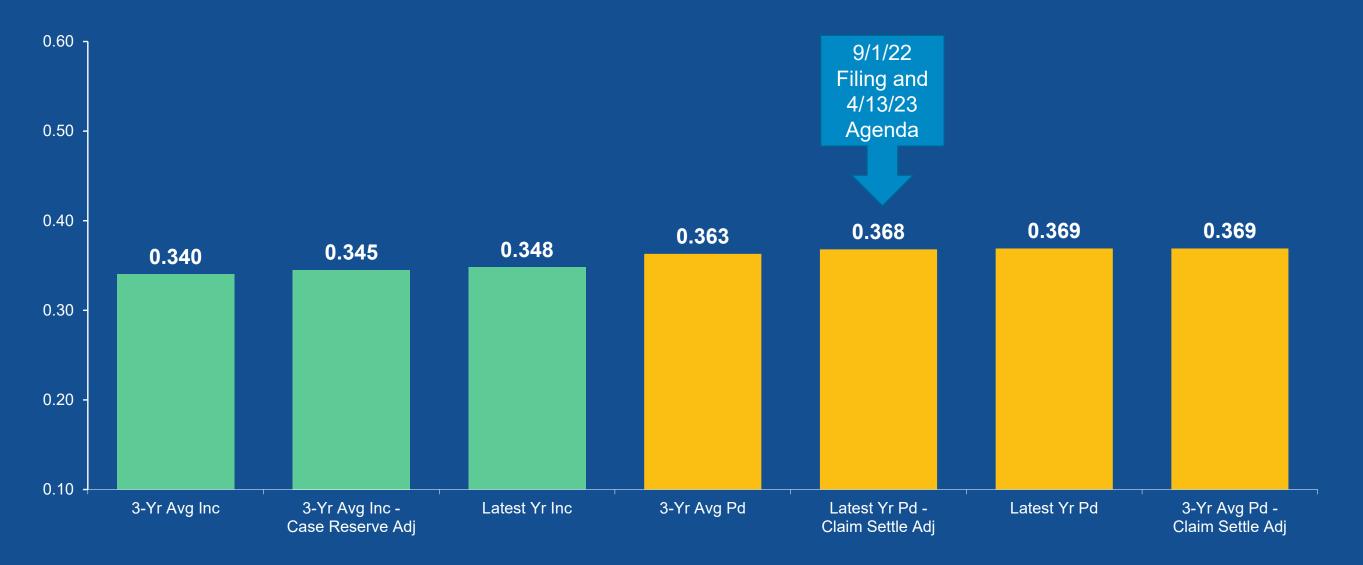


### Estimated Ultimate Indemnity Claim Settlement Ratios (Exhibit 11.2)



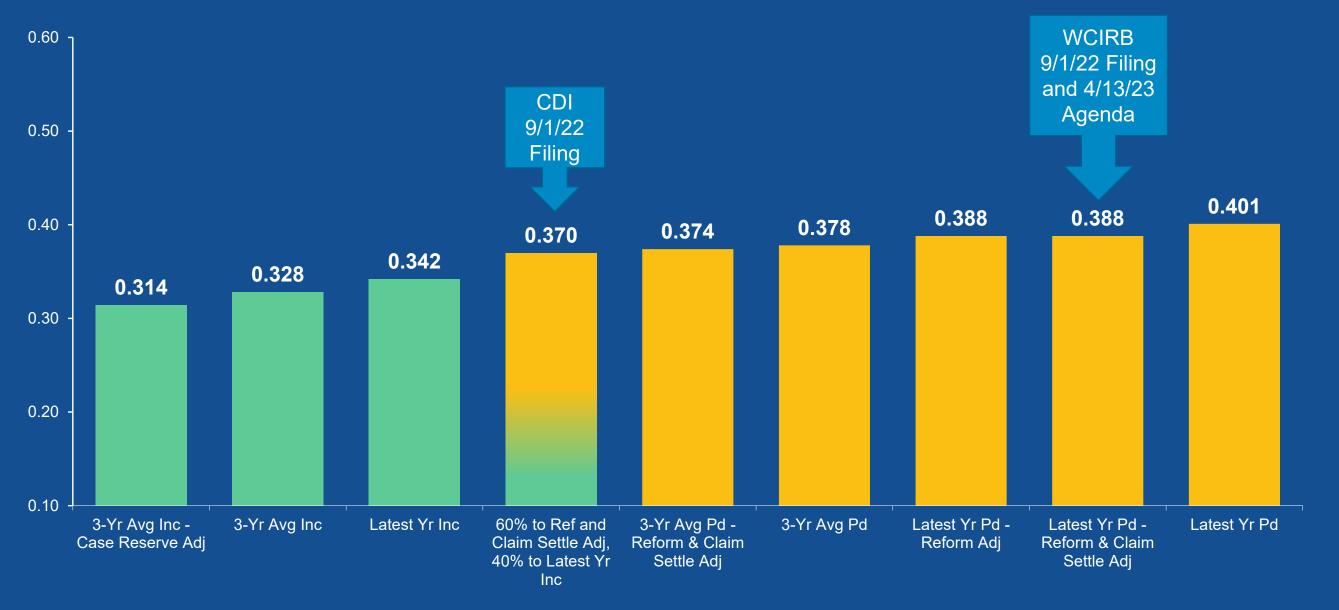


### Projected Indemnity On-Level Loss Ratios under Alternative Development Methods





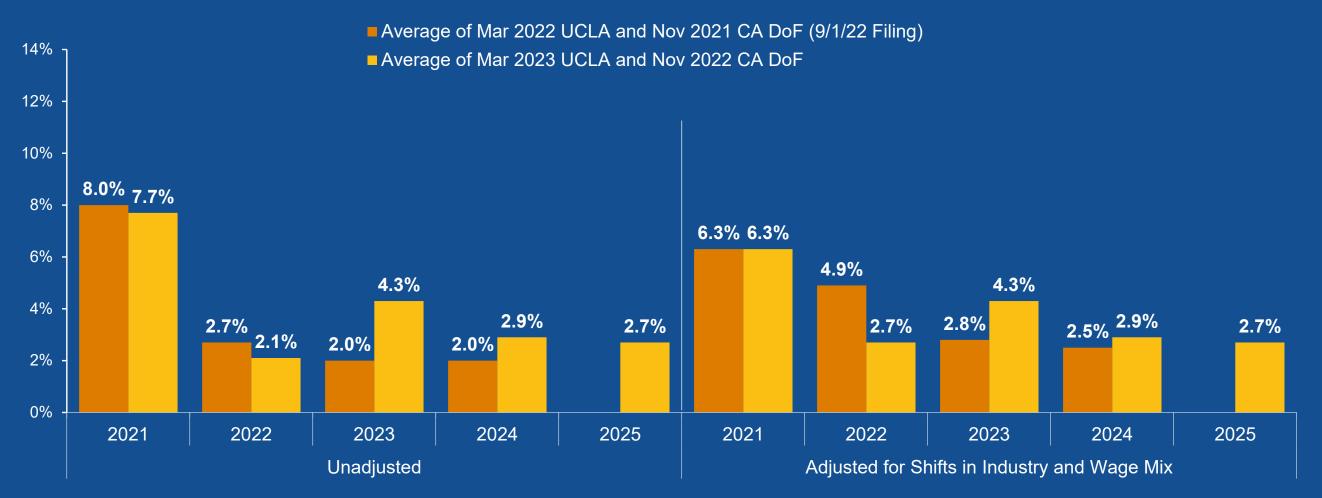
### Projected Medical On-Level Loss Ratios under Alternative Development Methods





### **Average Wage Level Change Forecast (Exhibit 5.1)**

As of March 2023



**Average Annual Adjusted Wage Change Projection from 2021:** 

9/1/2022 Filing: 3.7%

**Updated Forecast: 3.3%** 

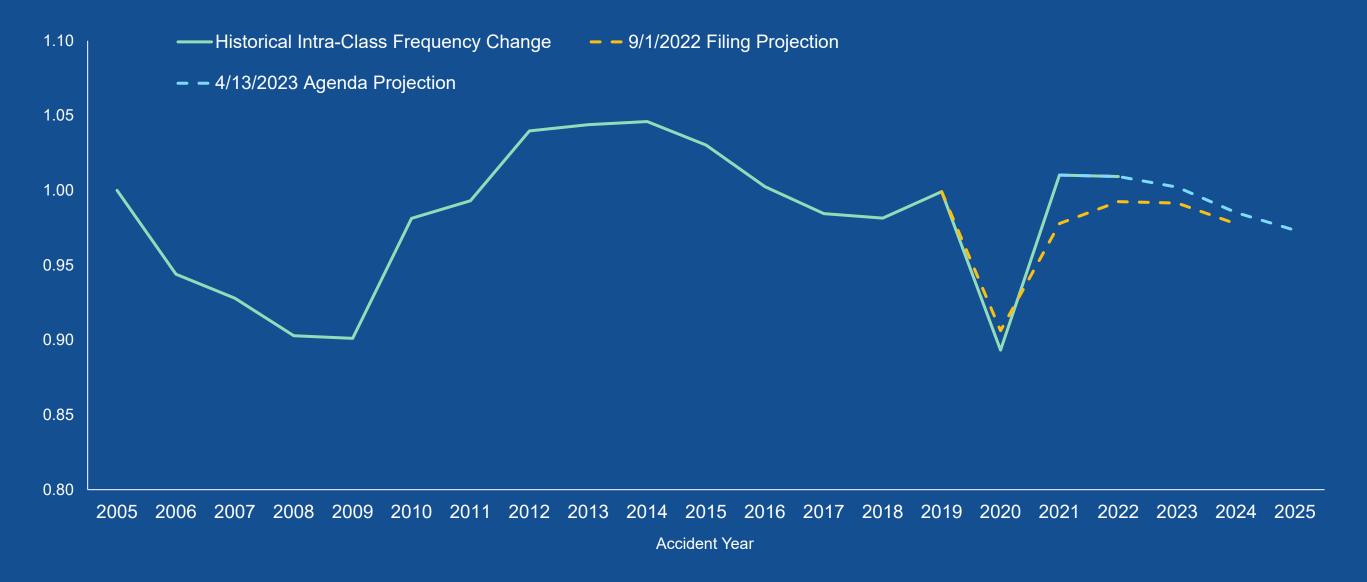


### Estimated Intra-Class Indemnity Claim Frequency Changes (Exhibit 12)

As of December 31, 2022 9/1/2022 Filing ■ 4/13/2023 Agenda 15% 13.1% 10% 7.9% 5% 1.5% 0% -0.1% -0.7% -1.2% -5% -10% -9.3% -10.6% -15% AY 2020: AY 2021: AY 2022: AY 2023 to 9/1/2024 (Annualized): Full Year USR Claim Counts / Indemnity Claim Frequency Model Partial Year USR Claim Counts / Aggregate Claim Counts / Adjusted Exposure Statewide Employment Adjusted Exposure



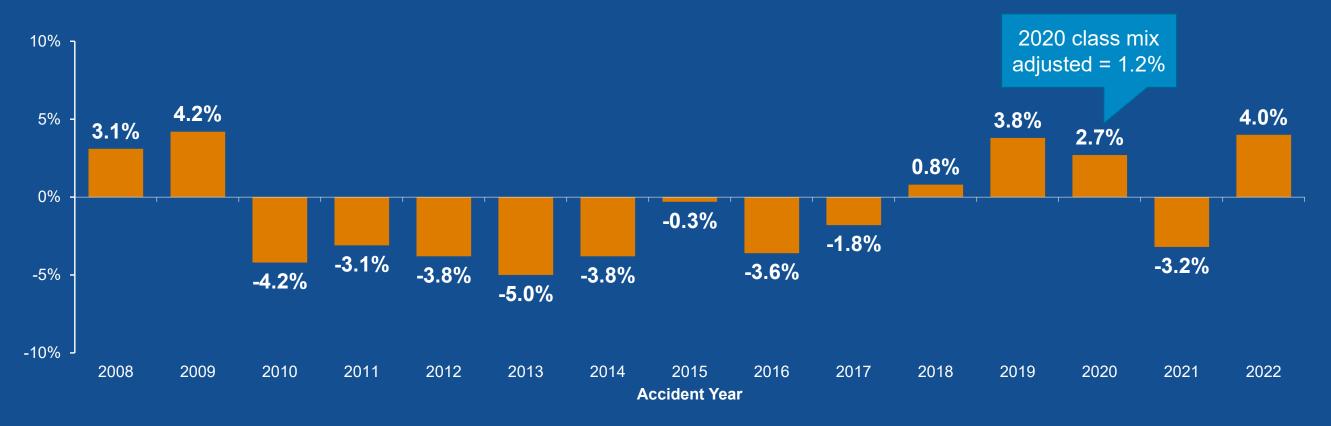
### **Indemnity Claim Frequency Indexed to 2005**





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

As of December 31, 2022



### **Annual Exponential Trend Based on:**

1990 to 2022: 0.8%

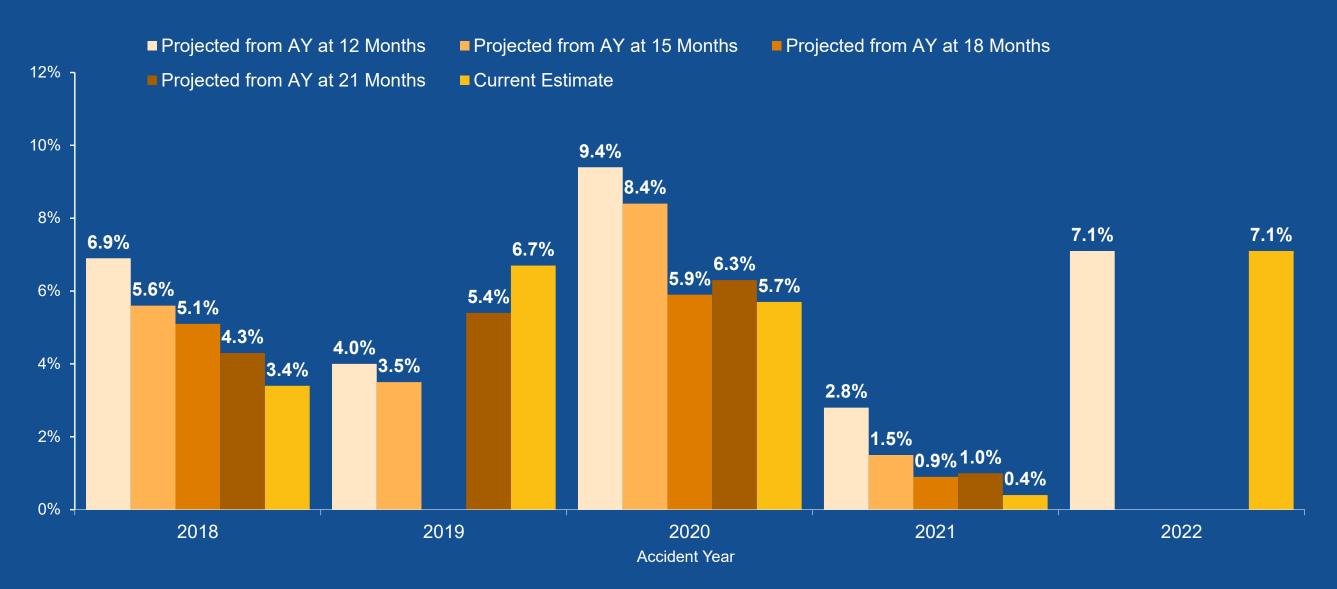
2005 to 2022: -1.1%

2018 to 2022: 1.4%

9/1/2022 Filing Selected: 1.0%

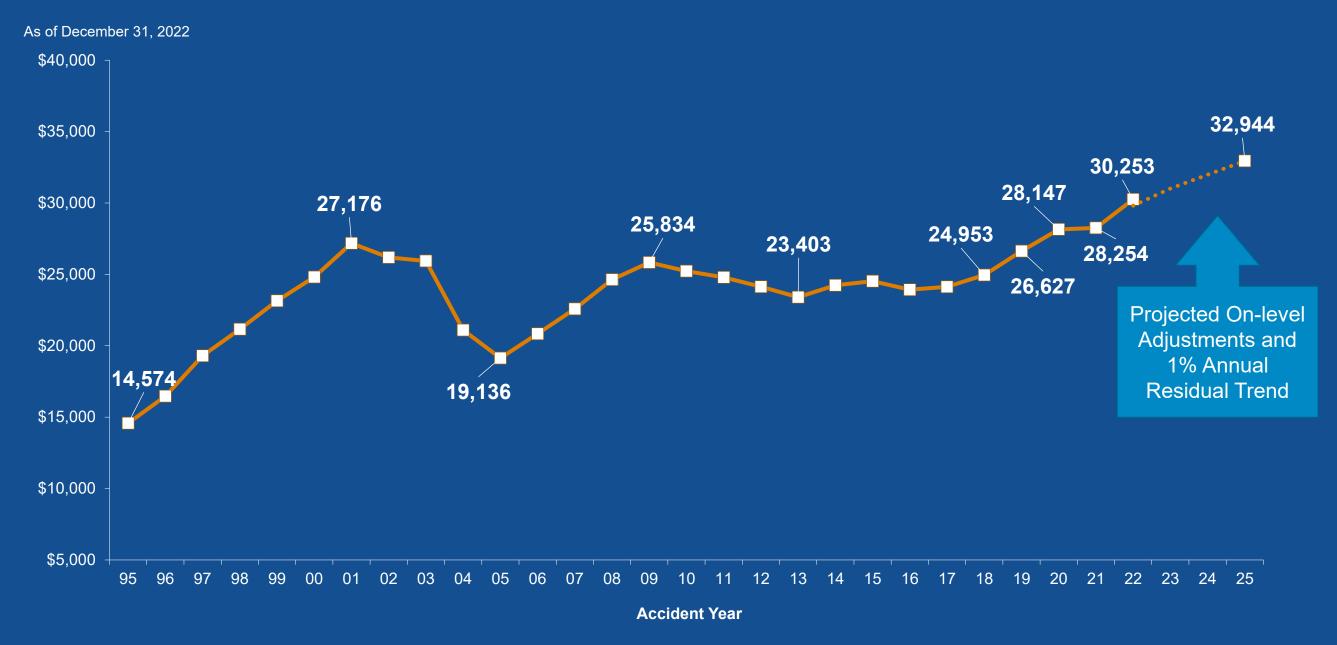


### Indemnity Severity Changes Projected from Early Evaluations Compared to Current



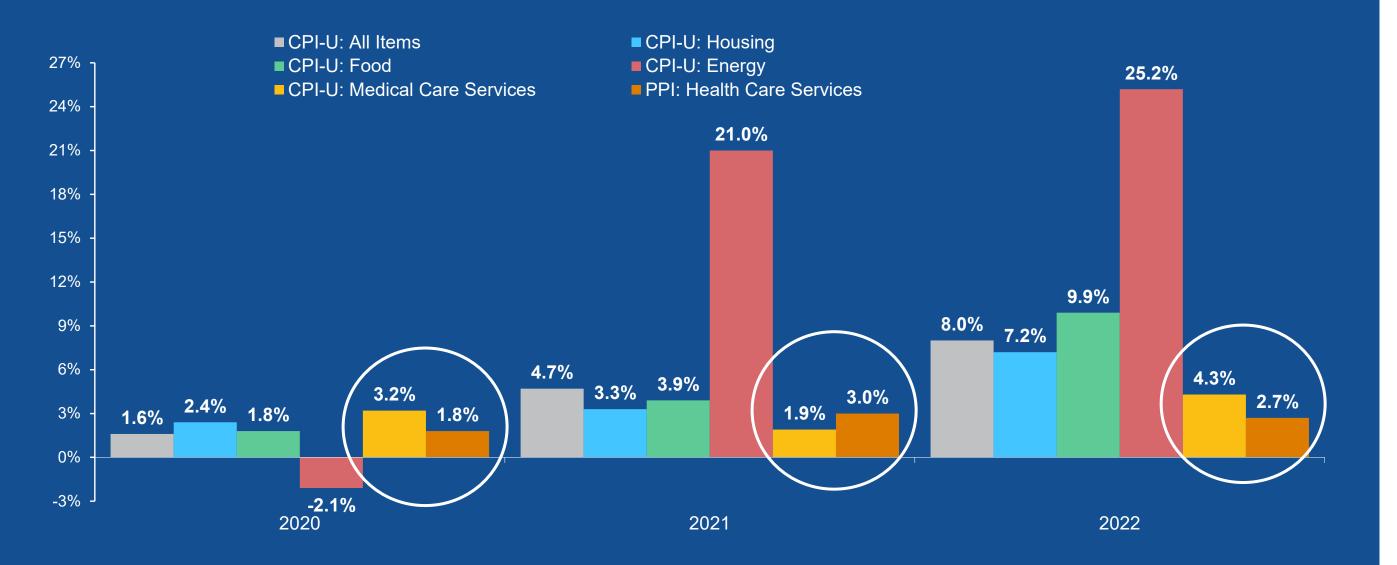


### **Ultimate Indemnity per Indemnity Claim**



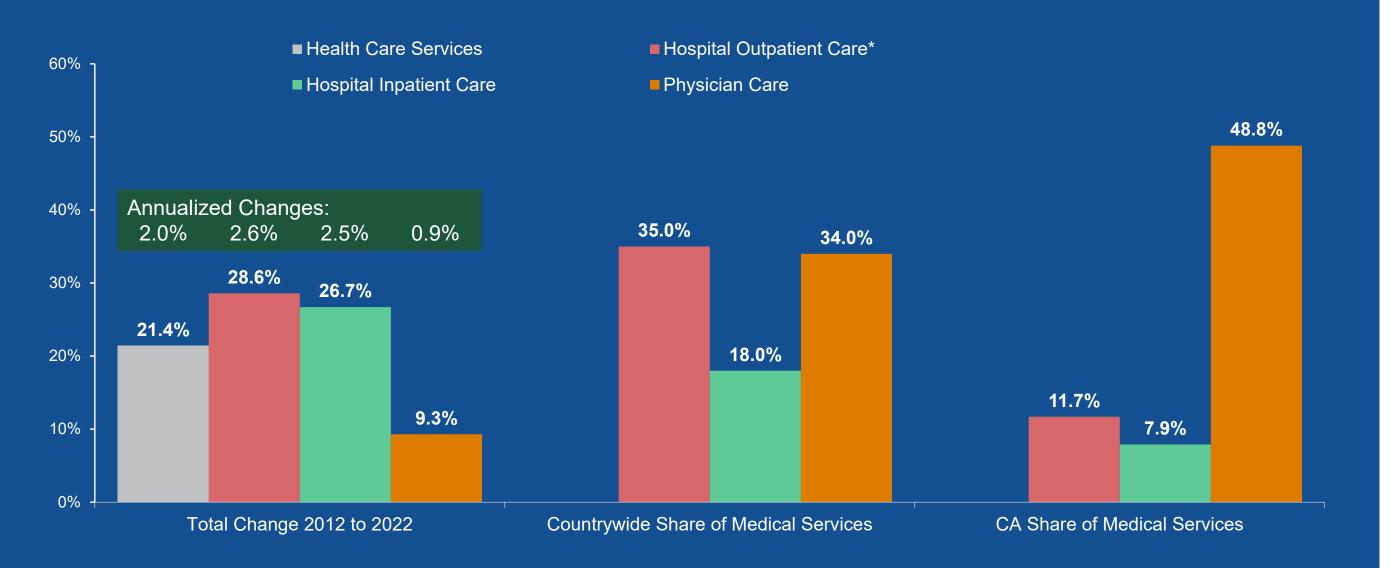


### **CPI Inflation by Category – Countrywide**





### **Producer Price Index (PPI) Changes 2012 to 2022 – Countrywide**



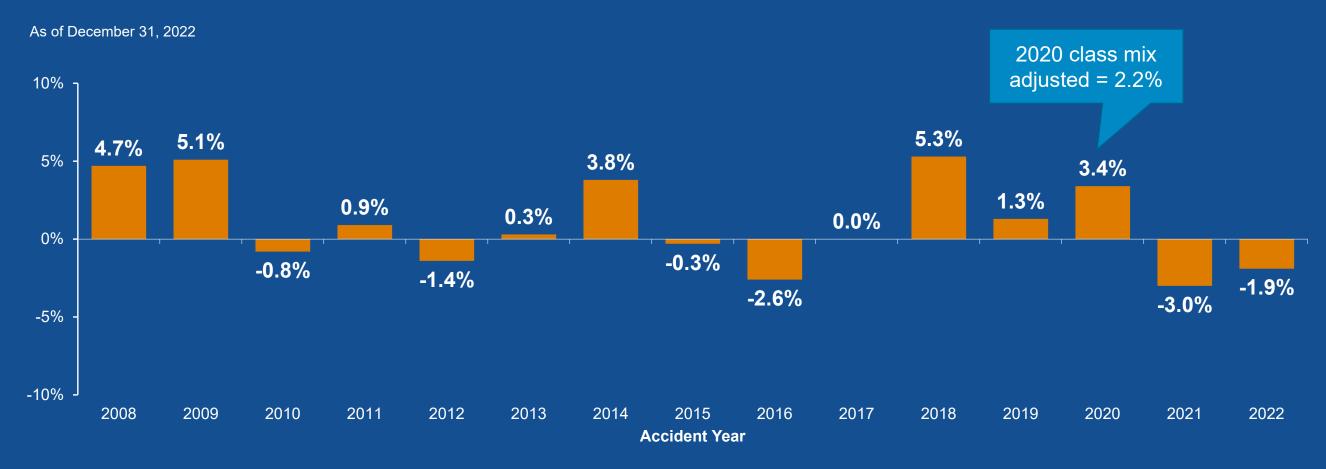


### Review of Medical Fee Schedule Changes

Fee Schedule	Effective Date	Update Type	Impact to Fee Schedule	Share of Total Medical Services	Impact on Total Medical Services	2022 Change Impact
Inpatient	12/1/2022	Regular inflation update	2.5% to 4.1%	7.9%	0.3%	0.4%
DMEPOS	1/1/2023	Regular inflation update	8.5%	10.5%	0.9%	0.1%
Path/Lab	1/1/2023	Regular inflation update	0.2%	0.2%	< 0.1%	< 0.1%
Ambulance	1/1/2023	Regular inflation update	8.7%	0.9%	< 0.1%	< 0.1%
Physician	2/15/2023	Regular inflation update	1.7%	48.8%	0.8%	0.5%
Outpatient/ ASC	3/1/2023	Regular inflation update	6.8%	11.7%	0.8%	0.4%
Others*	N/A	None	N/A	19.8%	N/A	N/A
Total				100%	2.8%	1.4%



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



### **Annual Exponential Trend Based on:**

1990 to 2022 (including MCCP): 4.6%

2005 to 2022: 1.3%

2018 to 2022: 0.0%

9/1/2022 Filing Selected: 1.5%

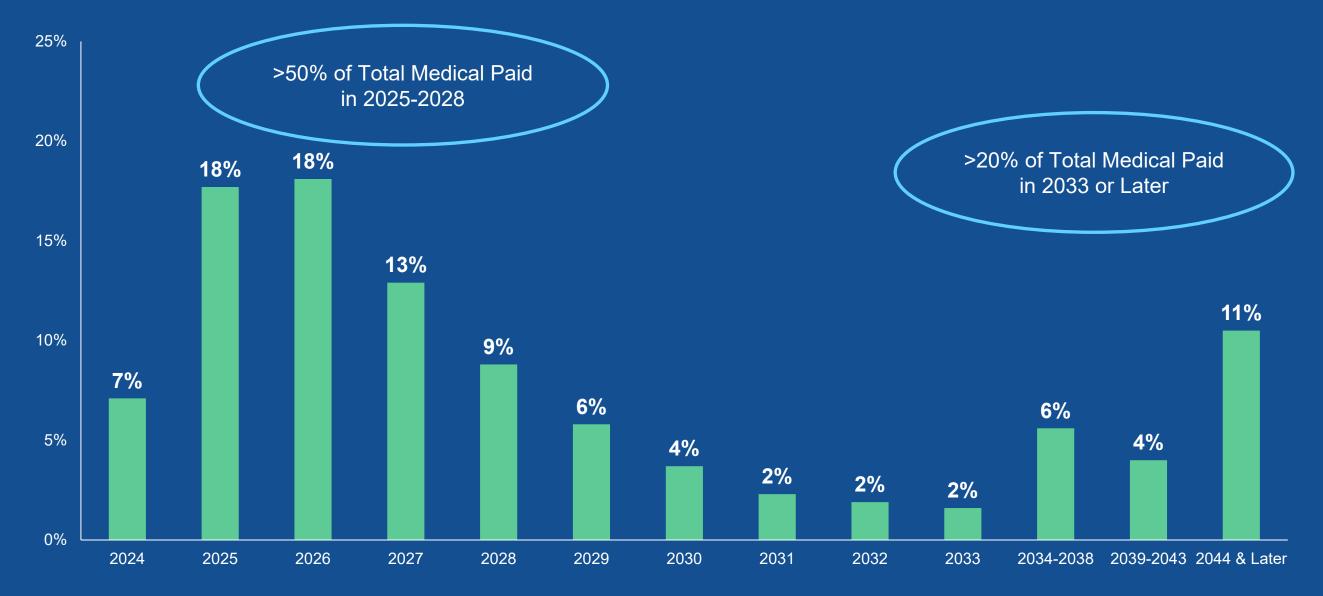


### Medical Severity Changes Projected from Early Evaluations Compared to Current



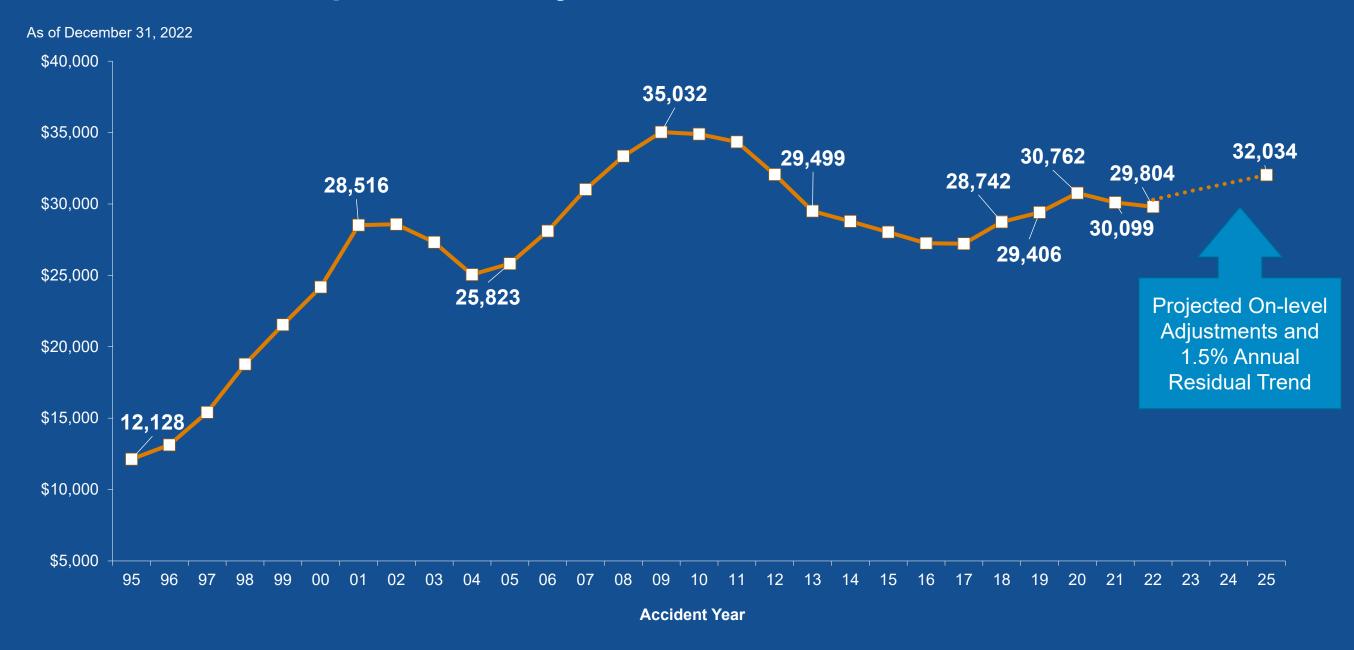


### Policy Year 2024 – Estimated Medical Paid by Year





### **Ultimate Medical per Indemnity Claim**





### Alternative Trending Methodologies (Item AC23-04-02)

- Separate Frequency & Severity Trends Projections
  - Best during periods when loss ratios are volatile
  - ★ Frequency and severity are affected by differing underlying forces
  - ★ Allows for separate assumptions and judgment about future trends
  - ★ Assumes frequency & severity not highly correlated
  - Performed well during 2002-2004 reform and SB 863 transition periods but not post-reform periods
  - Performed well in most recent study of trending methods
- Loss Ratio Trend Projections
  - Best during periods with stable loss ratio trends or when frequency and severity are highly correlated
  - Rely on accurate on-leveling adjustments
  - Performed well during post-2002 to 2004 reform period
  - ★ Did not perform well during 2002 to 2004 reform and SB 863 transition periods when trends change
  - Generally not as accurate as frequency & severity method in most recent trending study
  - Recent trends have moderated with SB 863 & SB 1160 reforms
  - ★ Unclear whether current loss ratio trends will continue into post-COVID-19 environment

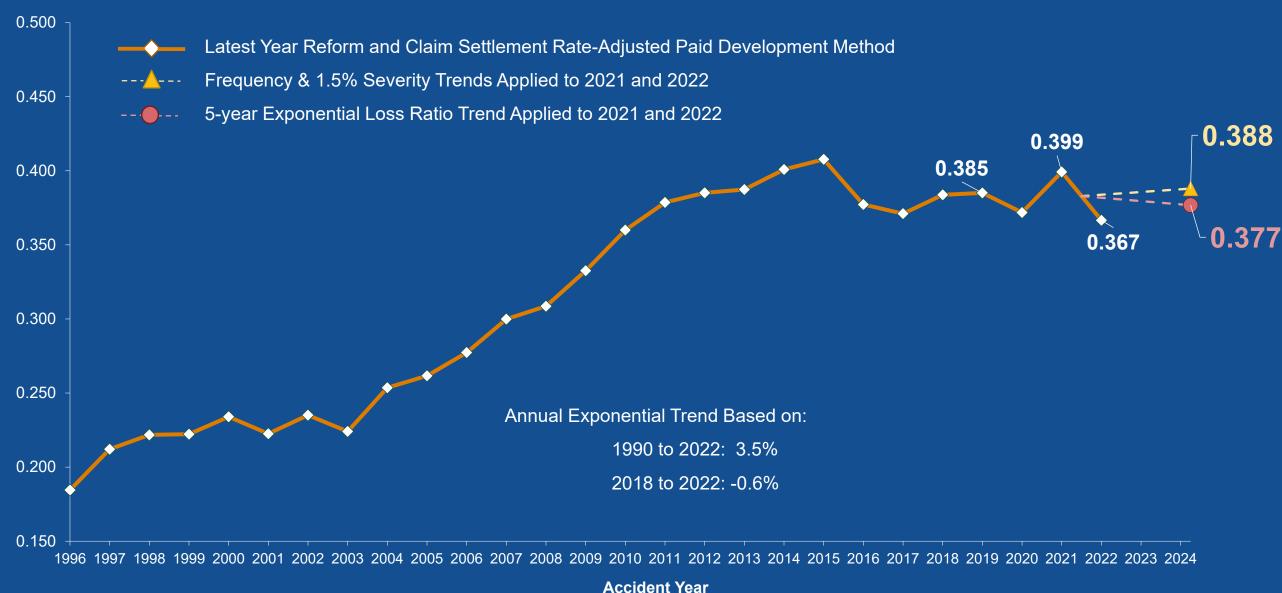


### **Projected On-Level Indemnity Loss Ratios**

As of December 31, 2022 0.600 Latest Year Claim Settlement Rate-Adjusted Paid Development Method Frequency & 1% Severity Trends Applied to 2021 and 2022 0.550 5-year Exponential Loss Ratio Trend Applied to 2021 and 2022 0.500 0.450 0.379 0.400 0.363 0.361 0.350 Annual Exponential Trend Based on: 1990 to 2022: -0.5% 0.300 2018 to 2022: 1.1% 0.250 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 **Accident Year** 



### **Projected On-Level Medical Loss Ratios**





### Projected On-Level Indemnity Loss Ratios under Alternative Trending Methods





### **Projected On-Level Medical Loss Ratios under Alternative Trending Methods**

As of December 31, 2022 **WCIRB** 9/1/22 Filing 0.60 and 4/13/23 CDI 9/1/22 Agenda Filing 0.50 0.421 0.419 0.387 0.388 0.40 0.377 0.372 0.369 0.30 0.20 0.10 Freq & Long-Term Freq & Short-Term 5-Year Long-Term Freq & 1.5% Freq (Avg w/ Freq & 1.5% Severity Loss Ratio Trend Severity Severity Applied to **Loss Ratio Trend** 2022 Model Est.) Severity Applied to Latest 2 Years & 1% Severity Applied to Applied to Latest Year Latest 2 Years Latest 2 Yrs Applied to 2 Years



07

9/1/2023 Filing – Loss Adjustment Expense Experience Review

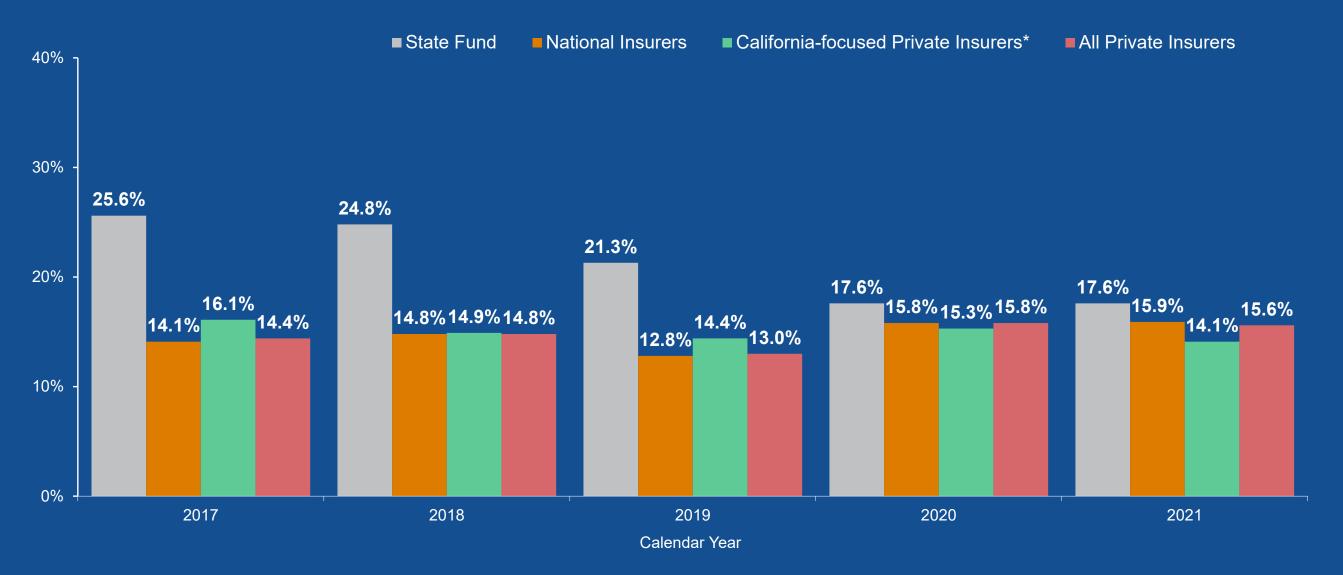


### **Summary of Preliminary ULAE Projection**

- CY 2020 and 2021 ULAE includes COVID-19 claims
  - Unable to separate ULAE on COVID-19 claims from other ULAE amounts
  - CY 2022 ULAE not yet available
- ULAE projection methodologies generally consistent with 9/1/2022 Filing
  - Average of open count-based method projection and recent CY ULAE to loss ratios
  - Projections of open claim counts exclude COVID-19 claims
  - Average of CY 2019 and 2021 ULAE (for severities/ratios) is used
- ULAE projection preliminary as projected ratios are impacted by frequency, wage, and loss projections



### Ratios of Paid ULAE to Paid Losses (Exhibit 1)





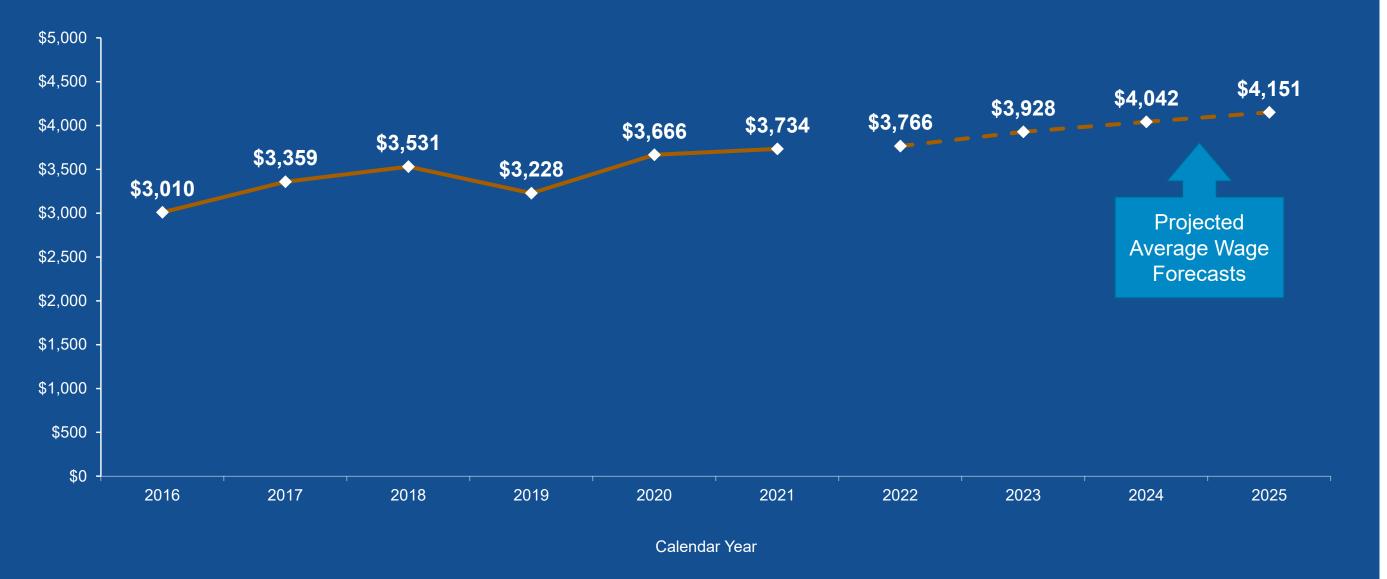
### ULAE Projection Methodology Open Indemnity Claim Count-based Projection

- Open Indemnity Claims at Beginning of Calendar Year
  - Projected using WCIRB frequency forecasts and recent reporting and closure patterns
  - Open claims by AY projected using latest incremental claim settlement pattern
  - Frequency forecasts consistent with those used for loss projection
  - COVID-19 claims excluded
- Calendar Year Paid ULAE per Open Indemnity Claim
  - Data based on private insurers only
  - COVID-19 claims included as COVID-19 ULAE cannot be separated from other ULAE
  - Future values projected using selected wage level changes
- Projected 9/1/2023 to 8/31/2024 Policy Inception Period ULAE
  - Trend to future CY based on average of CYs 2019 and 2021
  - (# of open indemnity claims) X (paid ULAE per open indemnity claim)
  - Use weighted average of CYs in 9/1 policy period (6%/72%/22%)
  - Paid ULAE per open claim projected out 3 years to approx. average ULAE payment date on claims



# Loss Adjustment Expense Experience Review 9/1/2023 Filing

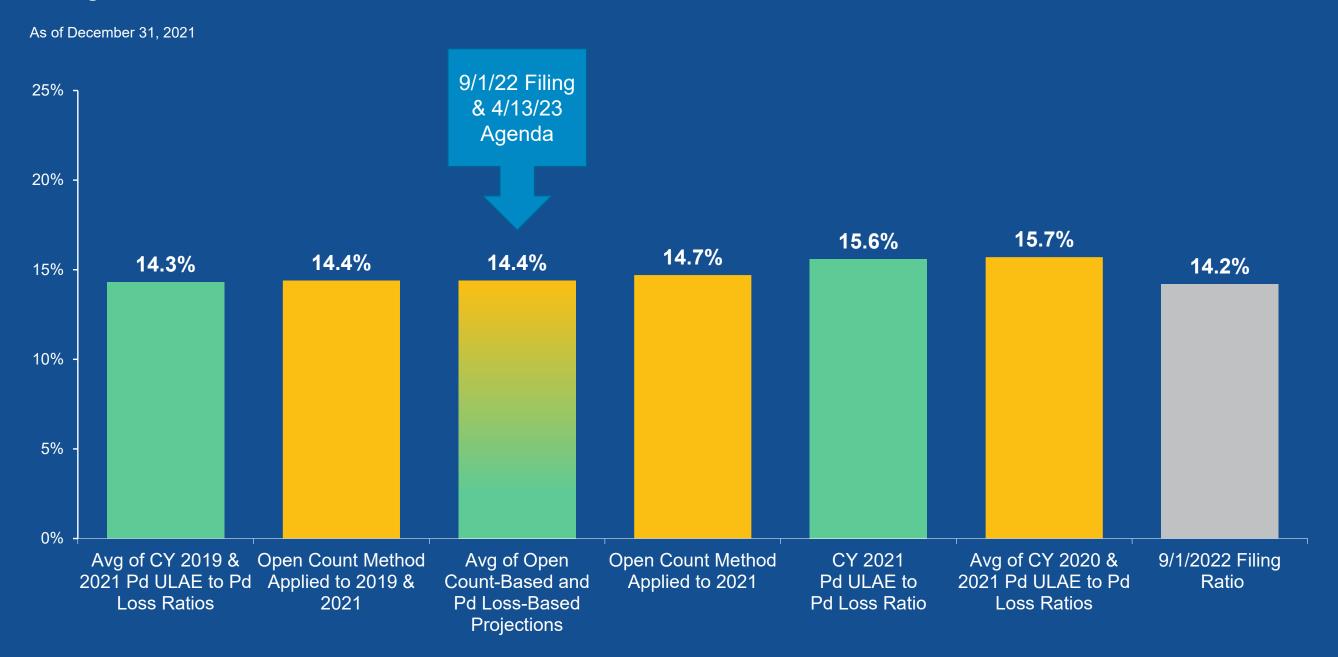
### Paid ULAE per Open Indemnity Claim – Private Insurers (Exhibit 3.5)





# - Loss Adjustment Expense Experience Review 9/1/2023 Filing

### **Projections of ULAE to Loss**





### **Summary of Preliminary ALAE and MCCP Projections**

- Data is through December 31, 2022 with COVID-19 claims and ALAE excluded
- Methodology is generally consistent with 9/1/2022 Filing
- Development is projected based on the latest year
  - ALAE development includes adjustment for changes to claim settlement rates
- Projection based on frequency and severity trends applied to accident years 2021 and 2022
- Adjustment to ALAE for the impact of SB 1160 updated with latest ALAE payment pattern
- ALAE and MCCP projections preliminary as projected ratios are impacted by frequency and loss projections



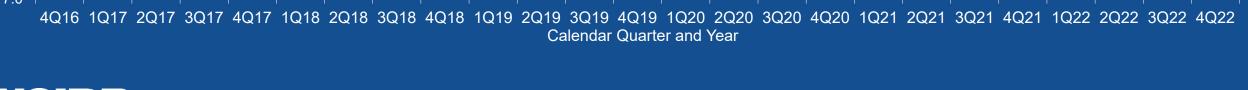
### Paid ALAE Development – Private Insurers (Exhibit 8.1)





### **Cumulative Paid ALAE Development from 12 to 90 Months**

As of December 31, 2022 16.0 15.0 14.0 12.76 13.0 12.0 10.85 11.0 9.27 9.43 9.55 9.61 10.0 9.0





8.0

#### **ALAE Projection Methodology**

- Accident Year Ultimate Indemnity Claim Counts
  - Latest year development
  - Projected using same frequency forecasts as loss projection
- Accident Year Ultimate ALAE per Indemnity Claim
  - Data based on private insurers only
  - Latest year development with adjustment for changes in claim settlement rates and inverse power curve tail
  - Projected using average of ultimate ALAE per indemnity claim and incremental paid ALAE per open indemnity claim for both long-term and short-term periods
- Projected 9/1/2023 Filing ALAE
  - (Projected # of ultimate indemnity claims) X (projected ultimate ALAE per indemnity claim)
  - Projection from AY 2021 and 2022
  - Initial projected ratio reduced for lien savings from SB 1160 & AB 1244 not yet significantly reflected in emerging ALAE costs
    - Full impact is -11.2% based on 70% reduction in lien filings
    - Tempered by 84% based on impact already emerging



# Loss Adjustment Expense Experience Review 9/1/2023 Filing

### Projected Changes in Ultimate ALAE Severity for Private Insurers (Exhibit 6)

As of December 31, 2022



#### **Annual Exponential Trend Based on:**

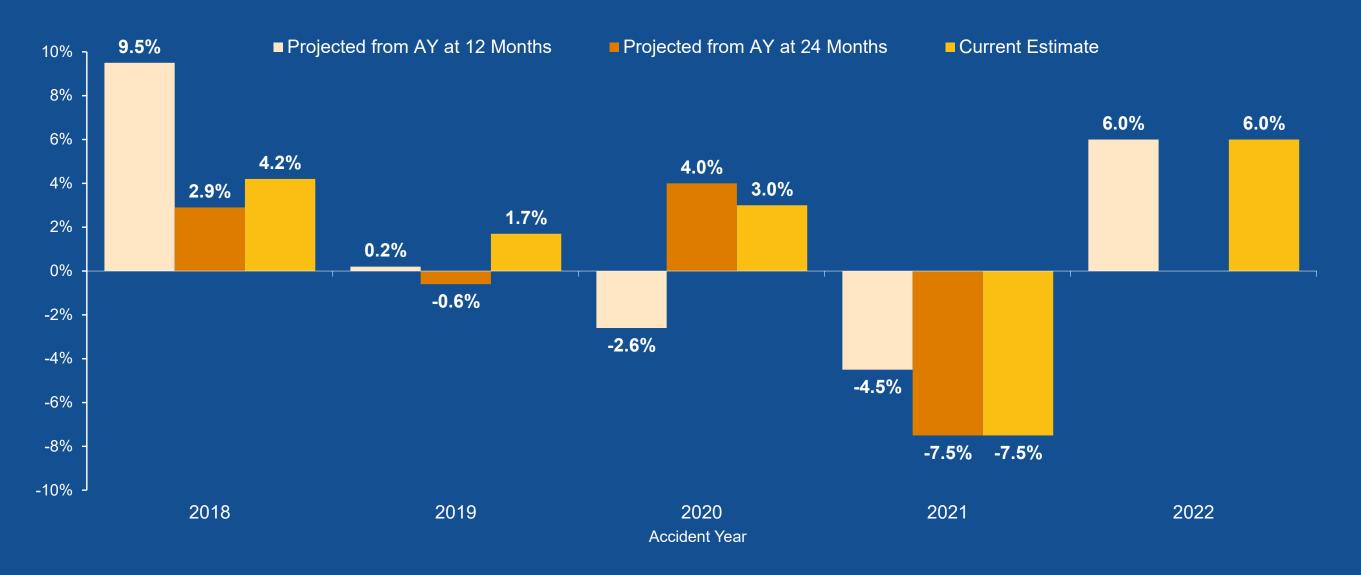
2008 to 2022: -0.3%

2018 to 2022: 0.0%



# Loss Adjustment Expense Experience Review 9/1/2023 Filing

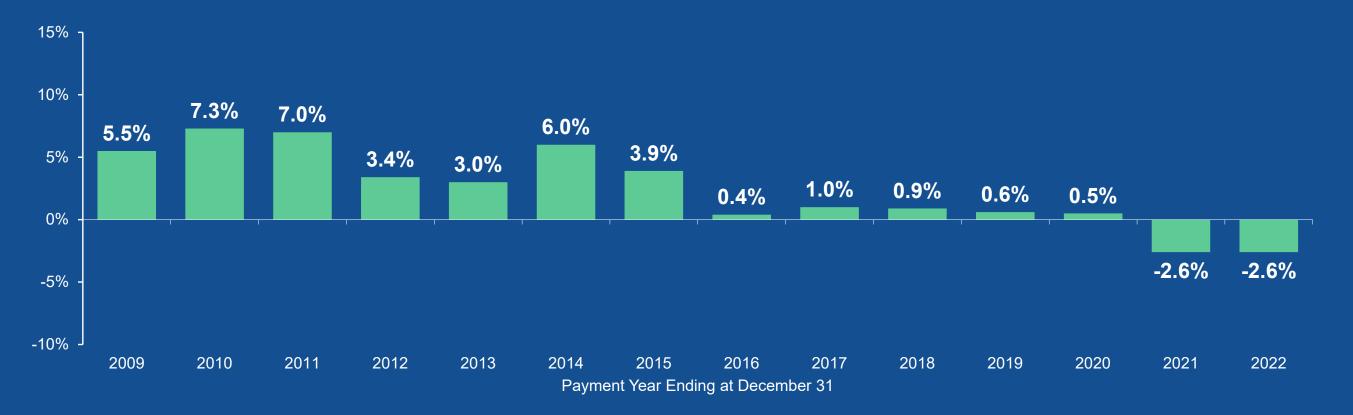
### **ALAE Severity Changes Projected from Early Evaluations Compared to Current**





### Change in Incremental Paid ALAE per Open Indemnity Claim for Private Insurers (Exhibit 7)

As of December 31, 2022



#### **Annual Exponential Trend Based on:**

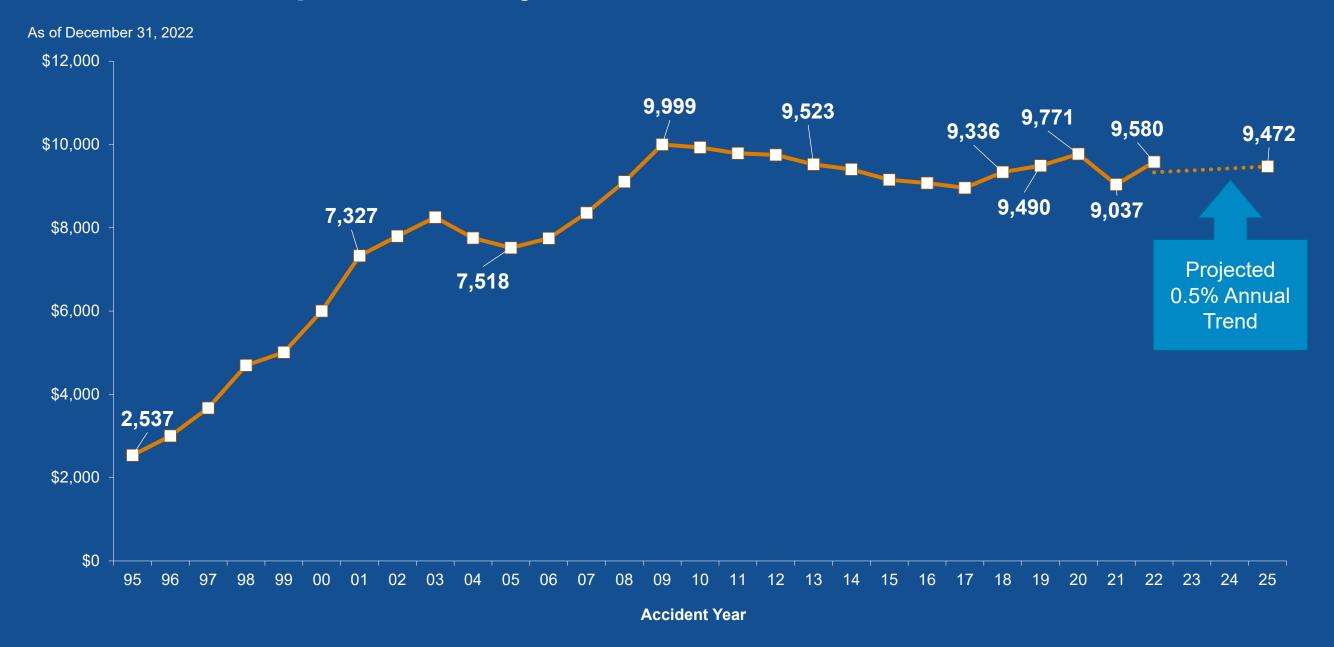
2008 to 2022: 2.5%

2018 to 2022: -1.0%

4/13/2023 Agenda Selected ALAE Severity Trend: 0.5%



#### **Ultimate ALAE per Indemnity Claim for Private Insurers**





# - Loss Adjustment Expense Experience Review 9/1/2023 Filing

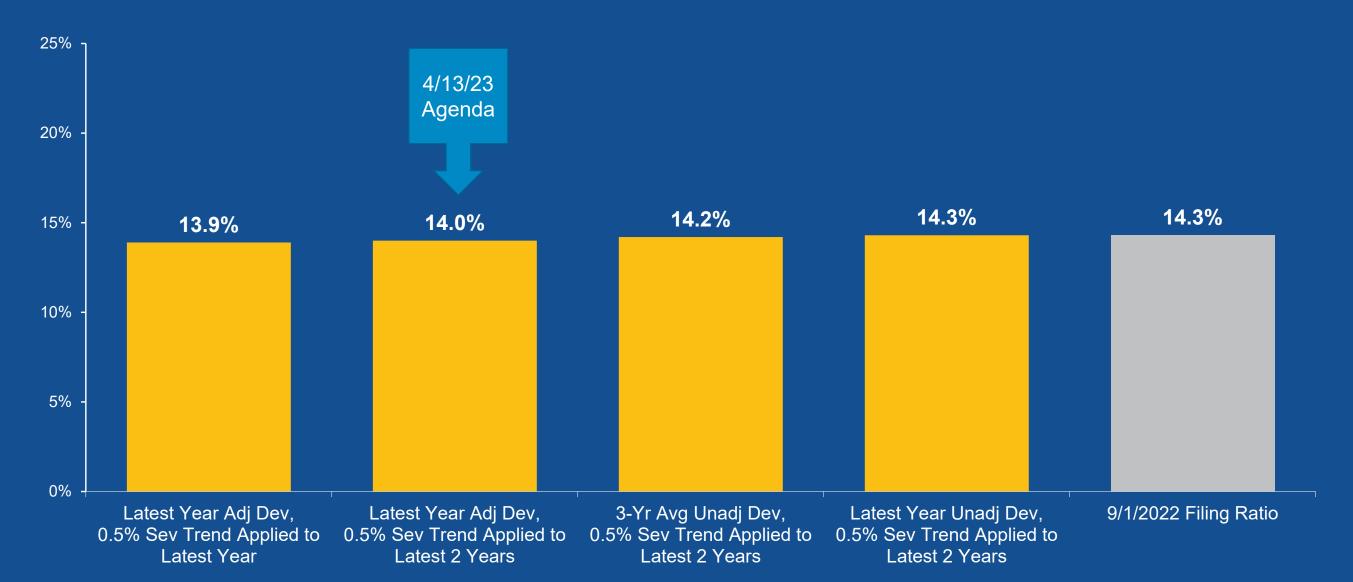
#### Adjustment for SB 1160 & AB 1244 Lien Reforms in ALAE

AY & Age	Estimated % of 168 Mon. ALAE Paid	Estimate Reflected in 9/1/2022 Filing
2018 (60 Months)	81%	
2017 (72 Months)	86%	
Average	84%	
Selected Tempering	84%	75%
Tempered Adjustment to ALAE (-11.2% Full)	-1.8%	-2.8%



# - Loss Adjustment Expense Experience Review 9/1/2023 Filing

#### Projections of ALAE (Excluding MCCP) to Loss





#### Paid MCCP Development (Exhibit 15.2)



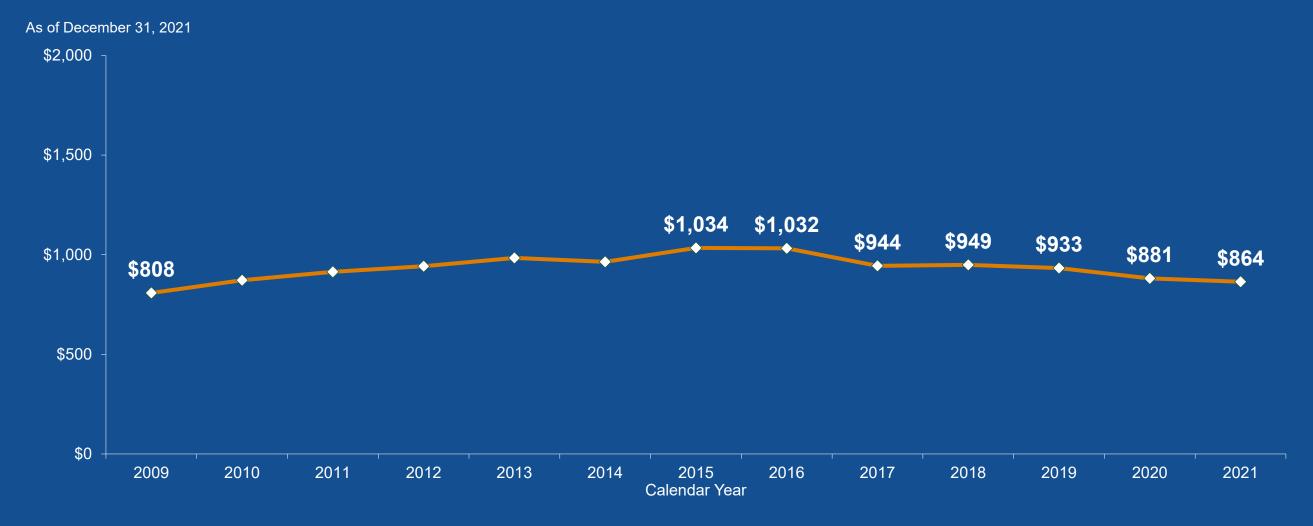


#### **MCCP Projection Methodology**

- MCCP methodology based on that for ALAE
  - Statewide data used
  - Development based on the latest paid MCCP through 132 months and paid medical after 132 months
  - Severity trend based on average changes in CY MCCP per open claim and ultimate AY MCCP per indemnity claim
  - Trend applied to 2021 and 2022



#### Calendar Year Paid MCCP per Indemnity Claims Inventory (Exhibit 14)

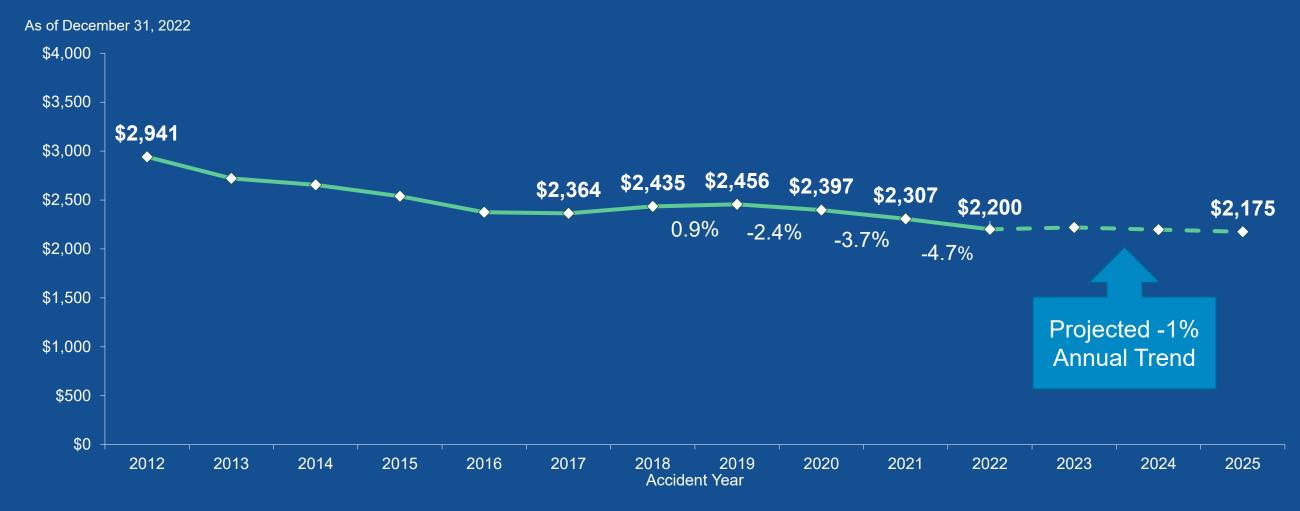


**Annual Exponential Trend Based on:** 

2009 to 2021: 0.3%



#### **Projected Ultimate MCCP per Indemnity Claim (Exhibit 13)**



**Annual Exponential Trend Based on:** 

2012 to 2022: -2.2%

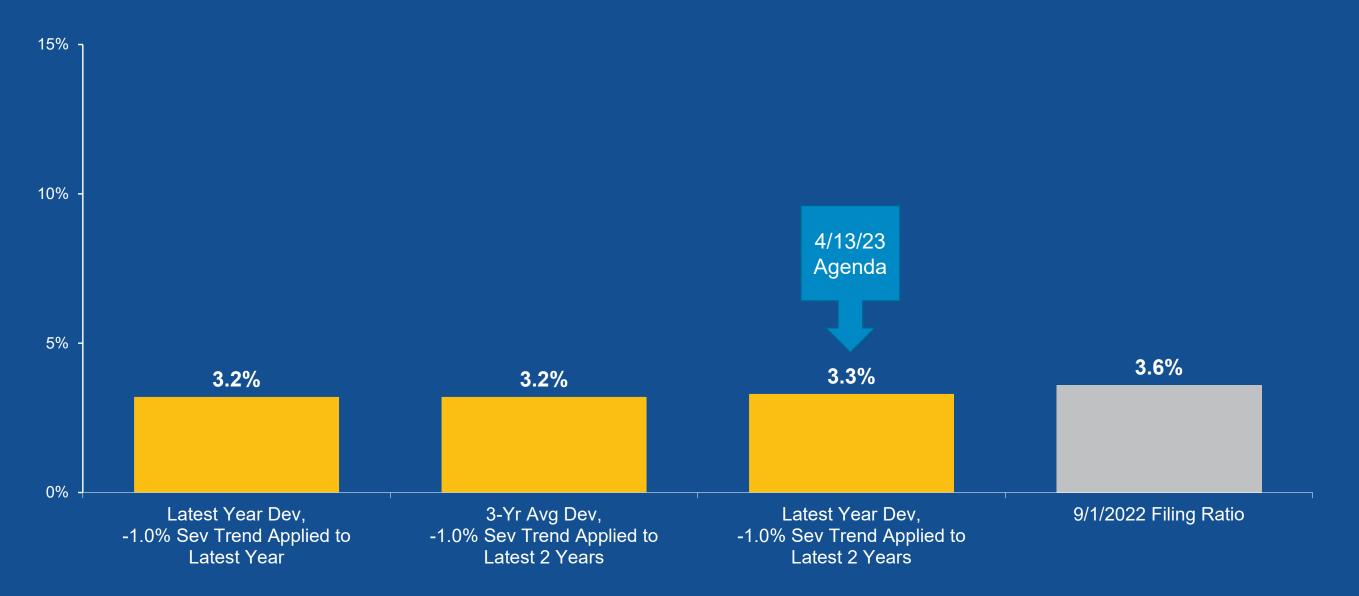
2018 to 2022: -2.6%

4/13/2023 Agenda Selected MCCP Severity Trend: -1.0%



# - Loss Adjustment Expense Experience Review 9/1/2023 Filing

#### **Projections of MCCP Costs to Loss**





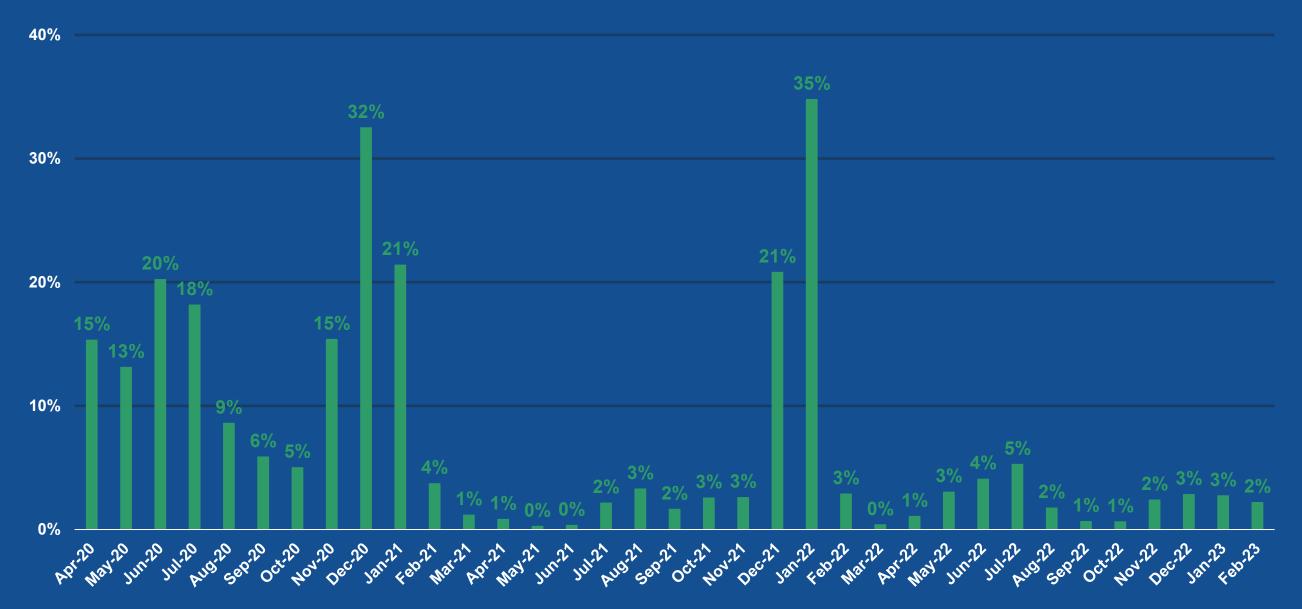
08

9/1/2023 Filling – COVID-19 Claim Cost Projection



#### **COVID-19 Share of Indemnity Claims**

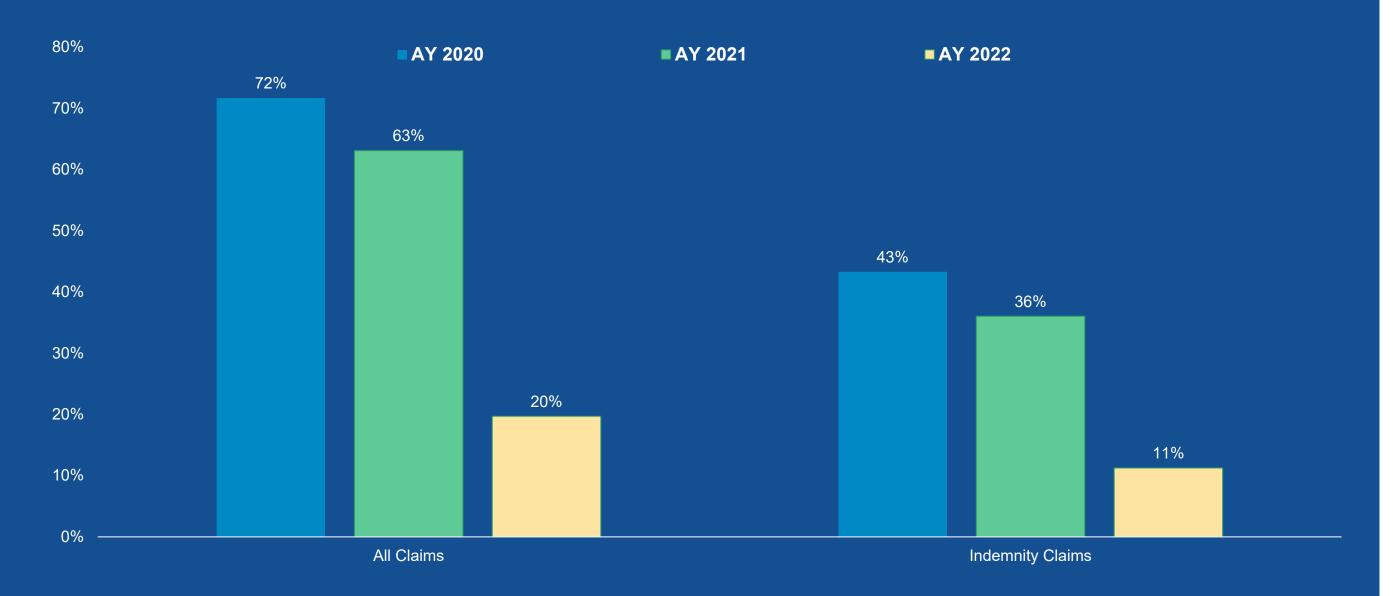
As of March 7, 2023





## COVID-19 Claim Cost Projection 9/1/2023 Filing

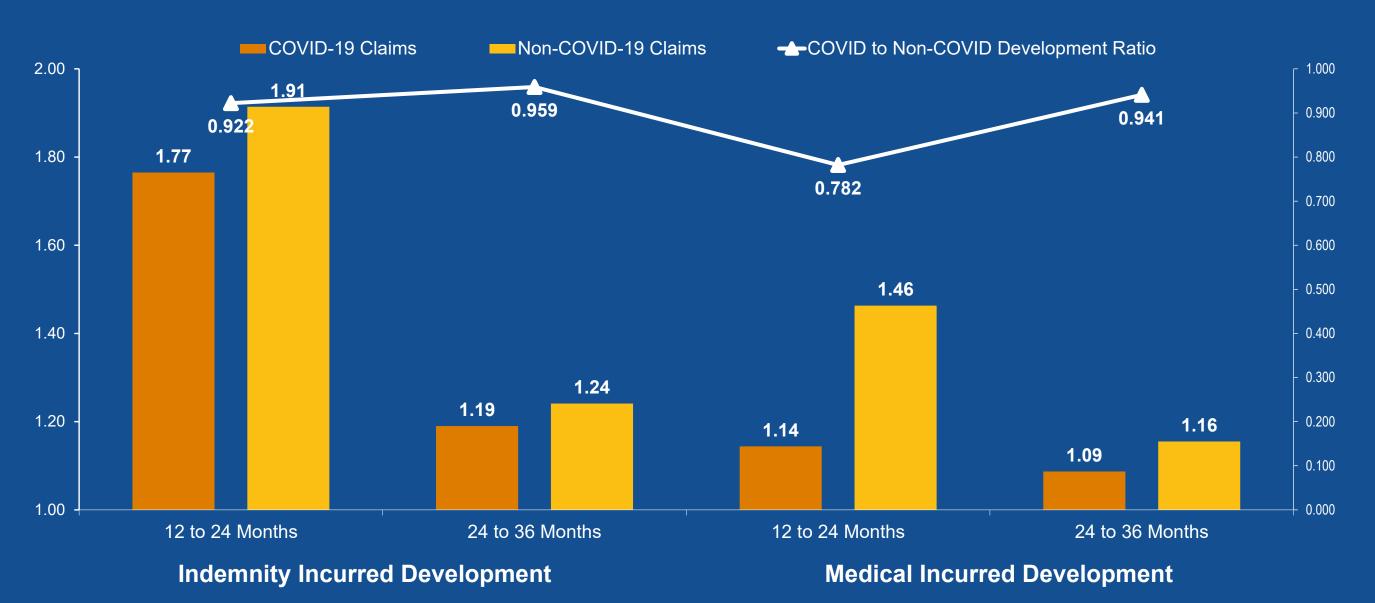
#### Ratio of COVID-19 to Non-COVID-19 Average Claim Severity





## - COVID-19 Claim Cost Projection 9/1/2023 Filing

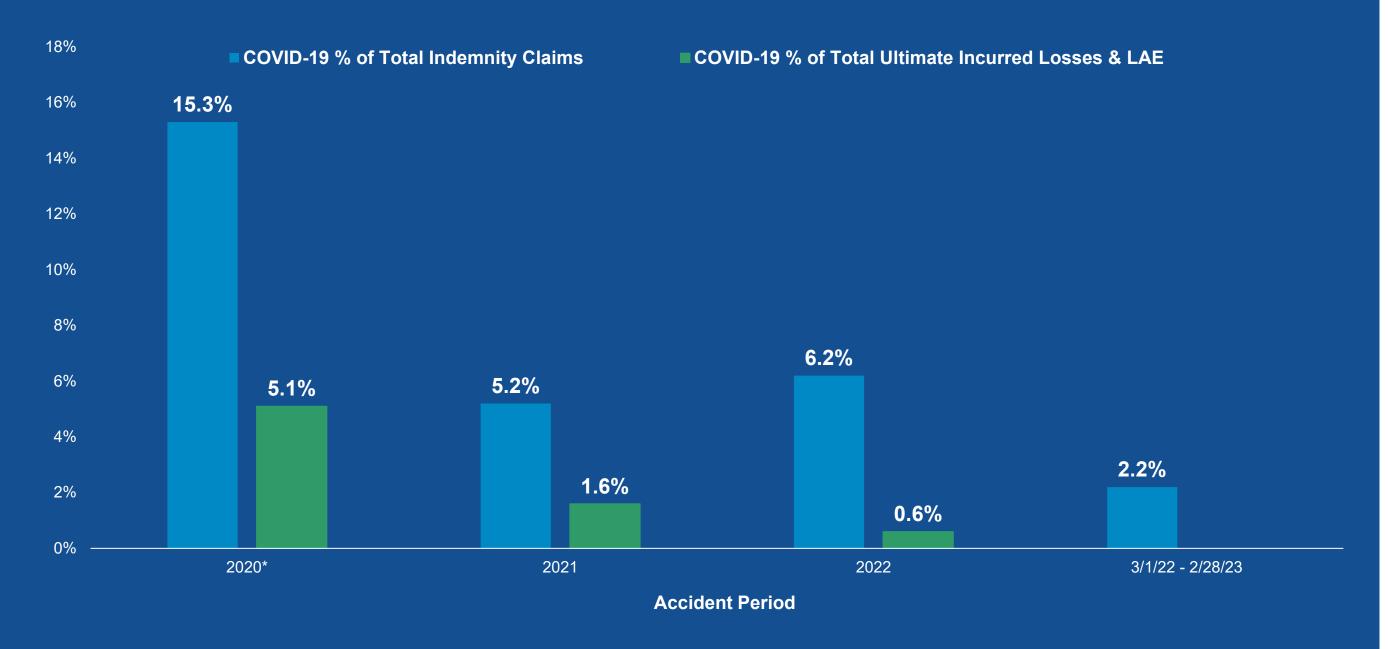
#### Accident Year Incurred Loss Development – 12/31/2021 to 12/31/2022





## COVID-19 Claim Cost Projection 9/1/2023 Filing

#### Estimated Share of COVID-19 Indemnity Claims and Ultimate Losses & LAE





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