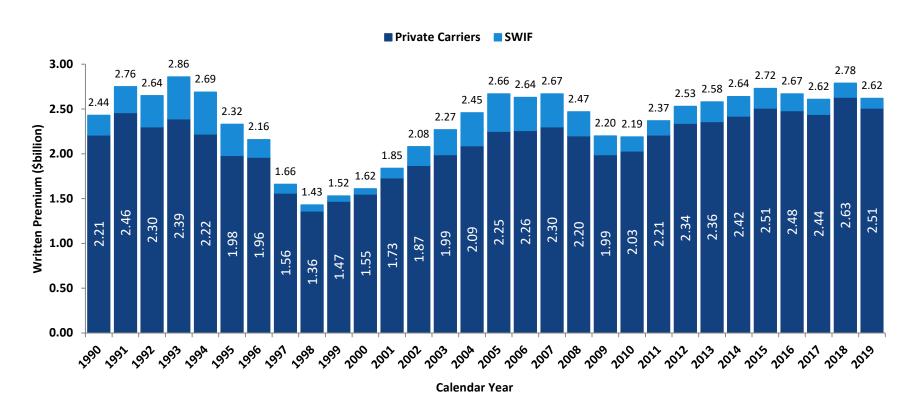




Pennsylvania Workers Compensation Insurance Market Results

Pennsylvania Direct Written Premium

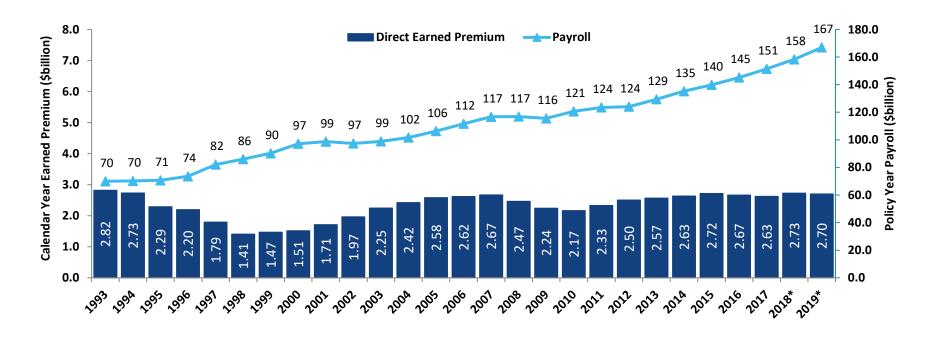


The level of written premium has fluctuated over the 30 years shown. Post the Great Recession, written premium started increasing again in 2010. Since 2014, the premium has fluctuated slightly between about \$2.6 billion and \$2.8 billion.

Source:

A.M. Best, Inc.: Best's State/Line Report

Pennsylvania Earned Premium and Payroll History



Earned Premium has risen and fallen over the 27 years shown. Payroll has more than doubled over the same time period.

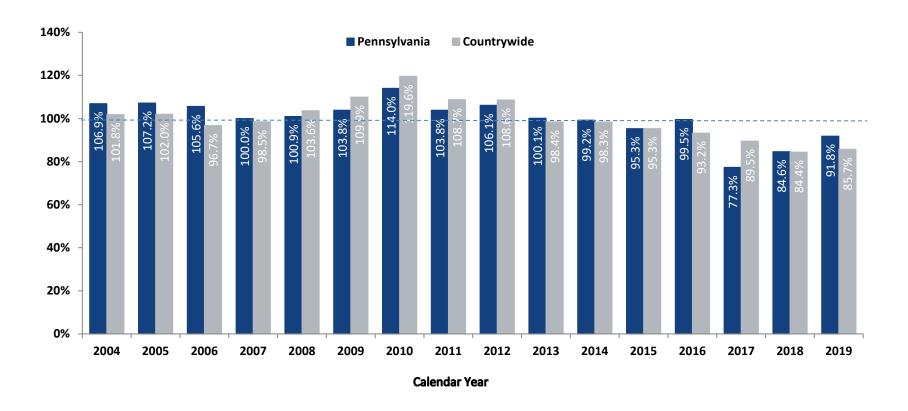
Sources:

Premium: A.M. Best, Inc.: Best's State/Line Report; Calendar Year Basis

Payroll: Unit Statistical Data; PCRB Financial Data Calls as of 12/31/2019, adjusted to an "effective" level to reflect deductible discounts; Policy Year Basis.

^{*} Payroll for Policy Years 2018 and 2019 is projected using the Statewide Average Weekly Wage.

Combined Ratios Pennsylvania and Countrywide

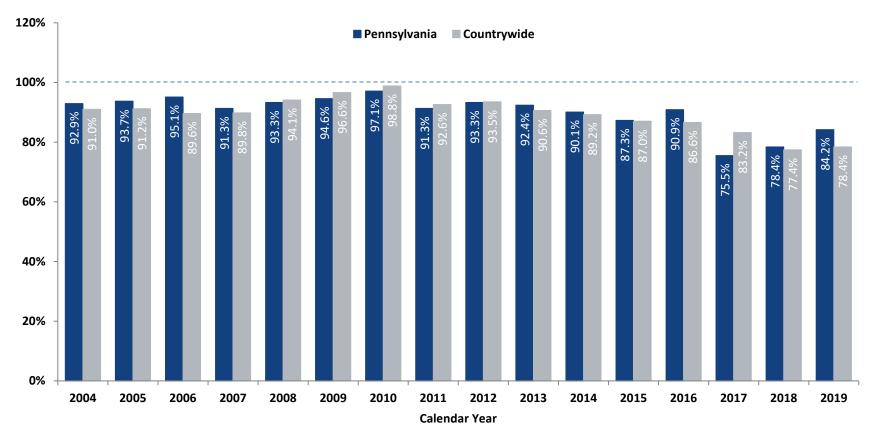


The Combined Ratio is the sum of the loss, LAE and underwriting expense ratios to premium, and does not include income from investments.

Source:

2020 NAIC Profitability by Line by State in 2019

After-tax Operating Ratios Pennsylvania and Countrywide



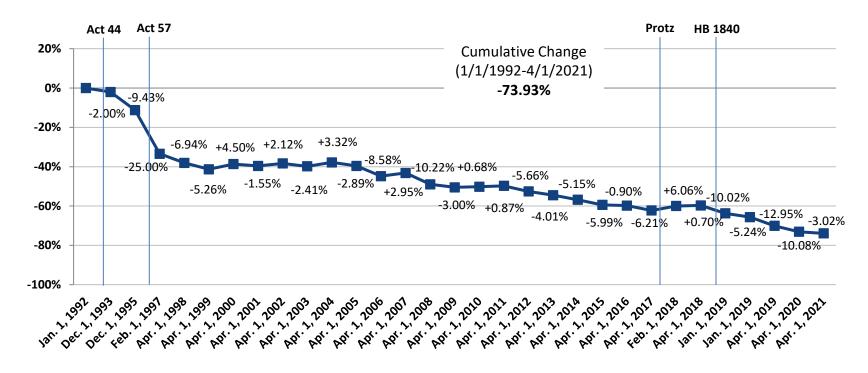
The After-tax Operating Ratio is the Combined Ratio less the Investment Gain on Insurance Transactions and a reduction for Federal Tax on Insurance Transactions. An operating ratio of less than 100 indicates an overall operating profit.

Source:

2020 NAIC Profitability by Line by State in 2019

Loss Costs and Market-wide Pricing

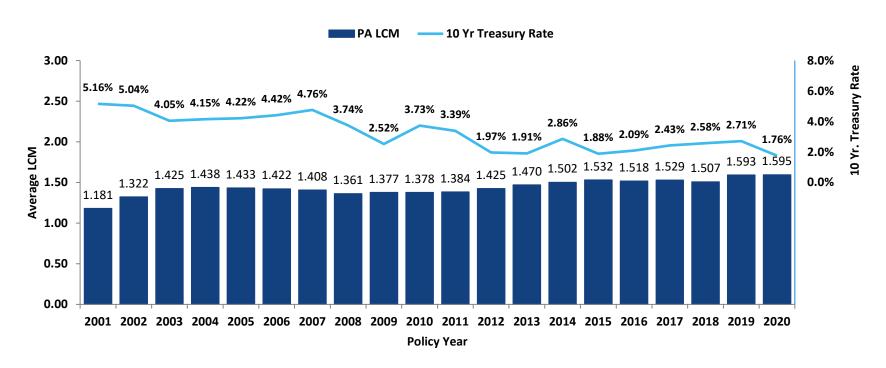
Pennsylvania Approved Loss Cost Change History



Significant Milestones:

- Act 44 of 1993 introduced several medical cost containment features into the Pennsylvania Workers Compensation Act and required that the PCRB file loss costs rather than rates.
- Act 57 of 1996 introduced several features that impacted indemnity benefits.
- Protz v. WCAB (*Derry Area School District*), June 2017, eliminated the provisions in the Workers Compensation Act that provided for Impairment Rating Evaluations.
- HB 1840 of 2017 (Act 111 of 2018), October 2018, reinstated the Impairment Rating Evaluation (IRE) process and lowered the impairment threshold percentage for making a change in disability status from 50% to 35%.

Pennsylvania Average Loss Cost Multiplier



The Average Loss Cost Multiplier (LCM) is the ratio of Total Carrier Manual Premium to Total Loss Costs at PCRB Level, as reported to the PCRB. It represents the average LCM, weighted by loss costs. Carriers must file their LCMs with the Insurance Department to convert PCRB loss costs, which only include claim costs, into manual rates, including loss adjustment expense, underwriting expenses, a provision for profit and contingencies, and any deviation to reflect differences in loss experience.

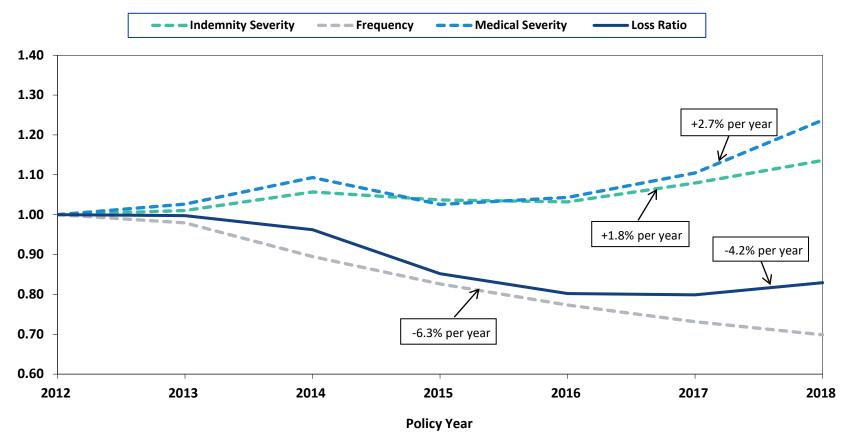
Investment returns, measured here by the 10-year Treasury Rate, are somewhat correlated with the magnitude of the average loss cost multiplier. The correlation coefficient, ρ , is -72.75%. The implication is that, in times of higher investment returns, average loss cost multipliers tend to be lower.

Sources:

PCRB Market Profile Report; US Treasury

Claim Frequency and Severity Trends

Pennsylvania Loss Components Frequency, Indemnity Severity, Medical Severity



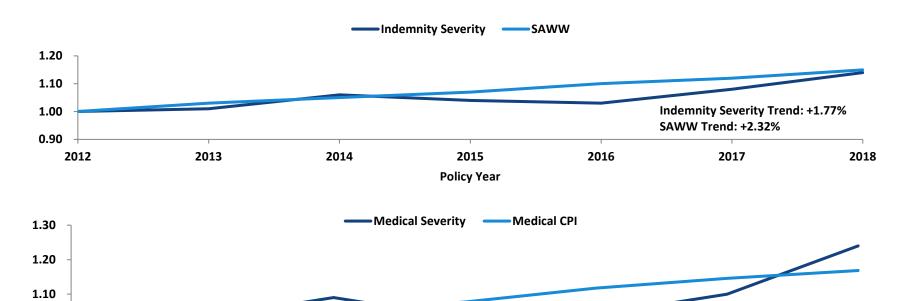
The combined impact of Frequency Trend, -6.3%, Indemnity Severity Trend, +1.8%, and Medical Severity Trend, +2.7%, is a Loss Ratio Trend of -4.2%.

Indexed to 1.00 at Policy Year 2012

Source:

PCRB 2021 Loss Cost Revision

Pennsylvania Severity Compared to Selected Indices



Changes in indemnity severity appear to be lower than the changes to the state's average weekly wage. Changes in medical severity were lower than the Medical Consumer Price Index (CPI) in 2015, 2016 and 2017, and then exceeded the Medical CPI in 2018.

2015

Policy Year

2016

2014

Indexed to 1.00 at Policy Year 2012

2013

Sources:

1.00

0.90

2012

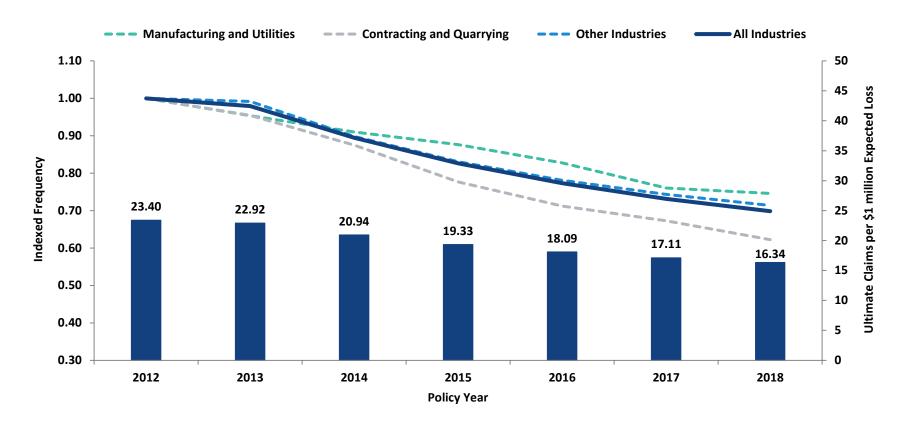
PCRB 2021 Loss Cost Revision PA Department of Labor US Bureau of Labor Statistics 2018

Medical Severity Trend: +2.67%

Medical CPI Trend: +2.73%

2017

Claim Frequency Trend is Consistent by Industry Group



Notes: Excludes large deductible business

Claim frequency is measured by the number of ultimate claims per \$1 million of expected losses.

Decreasing frequency contributes to reductions in statewide loss cost levels.

Indexed to 1.00 at Policy Year 2012

Source:

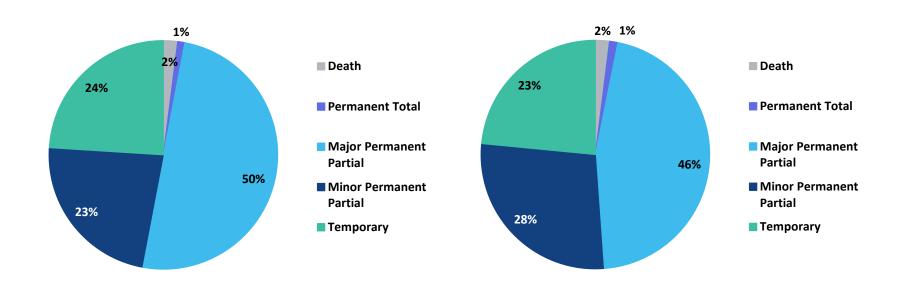
PCRB 2021 Loss Cost Revision

Distributions of the Pennsylvania Workers Compensation System

Indemnity Benefits by Type of Injury

5 Policy Year Average (2009-2013)

5 Policy Year Average (2013-2017)



Over these time periods, the portion of indemnity benefits attributable to Major Permanent Partial injuries decreased by 4 percentage points, while the portion attributable to Minor Permanent Partial injuries increased by 5 percentage points. The other types of injury exhibited smaller changes.

Based on losses developed to ultimate values.

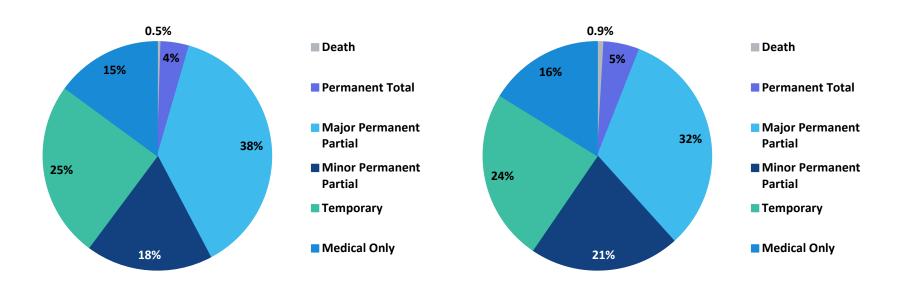
Sources:

2009-2013: PCRB 2017 Loss Cost Revision 2013-2017: PCRB 2021 Loss Cost Revision

Medical Benefits by Type of Injury

5 Policy Year Average (2009-2013)

5 Policy Year Average (2013-2017)



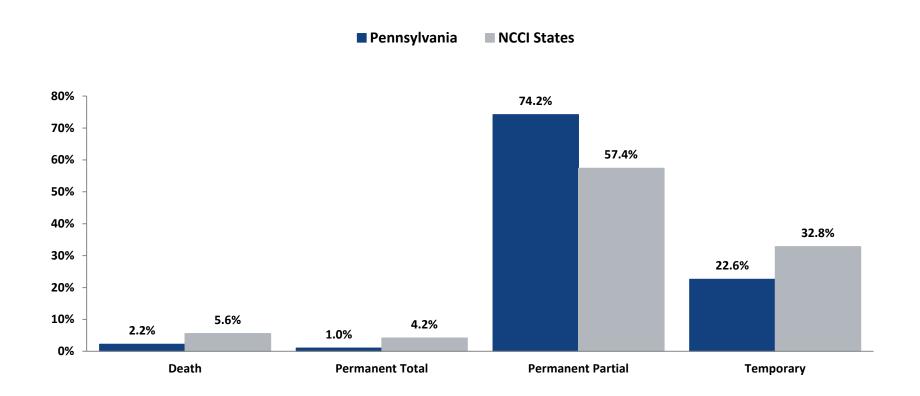
Over these time periods, the portion of medical benefits attributable to Major Permanent Partial and Temporary Total injuries decreased by 6 and 1 percentage points, respectively. The portion attributable to Minor Permanent Partial, Medical Only and Permanent Total injuries increased by 3, 1 and 1 percentage points, respectively.

Based on losses developed to ultimate values.

Sources:

2009-2013: PCRB 2017 Loss Cost Revision 2013-2017: PCRB 2021 Loss Cost Revision

Ultimate Indemnity Benefits by Type of Injury



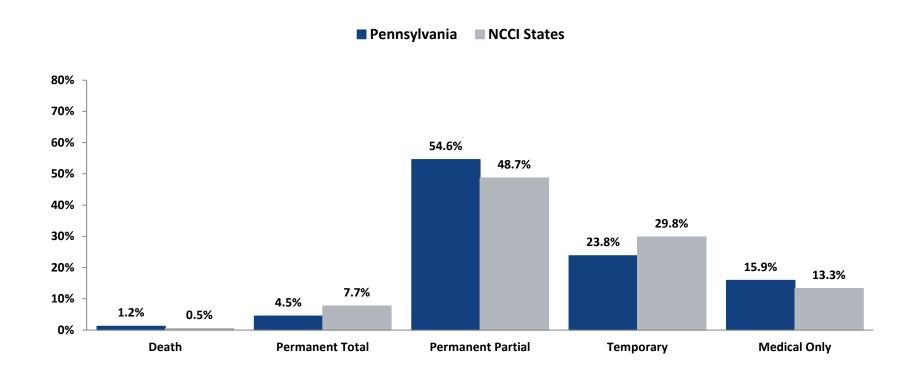
Pennsylvania has a higher percentage of Permanent Partial benefits and a lower percentage of Temporary benefits in comparison to the NCCI states.

Sources:

PCRB 2021 Loss Cost Revision

NCCI States: 2020 Annual Statistical Bulletin

Ultimate Medical Benefits by Type of Injury



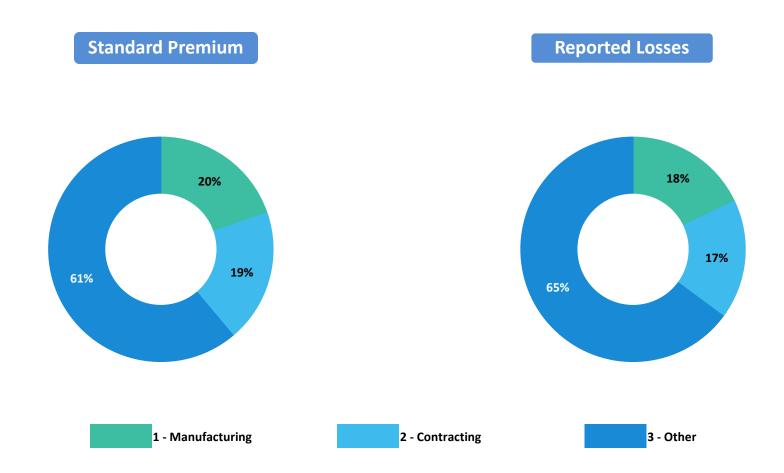
The largest component of medical costs is payments for Permanent Partial (more than half of total medical cost). The NCCI States have higher percentages of Permanent Total and Temporary injury types, while Pennsylvania has higher percentages of Permanent Partial and Medical Only claims.

Sources:

PCRB 2021 Loss Cost Revision

NCCI States: 2020 Annual Statistical Bulletin

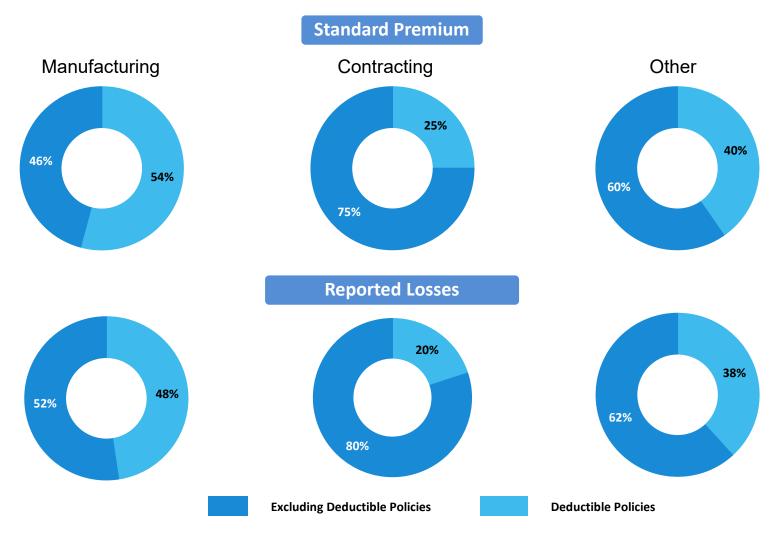
Premium and Loss by Industry Group



Source:

PCRB 2021 Loss Cost Revision, Policy Year 2017

Premium and Loss by Industry Group

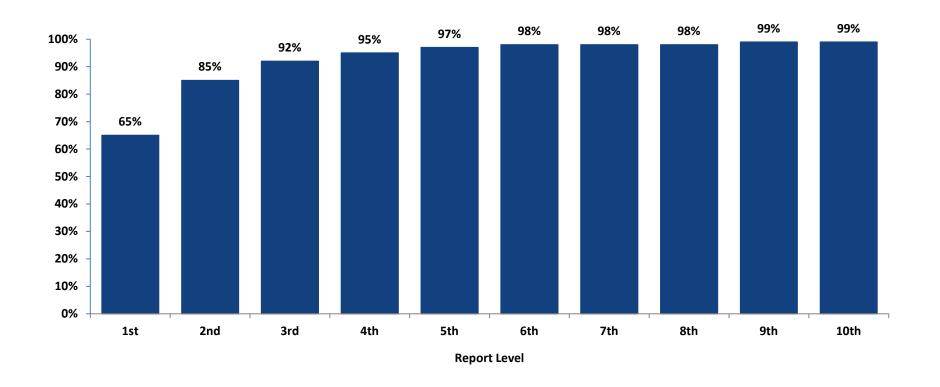


Source:

PCRB 2021 Loss Cost Revision, Policy Year 2017

Measures of Claim Reporting

Portion of Reported Indemnity Claims Closed

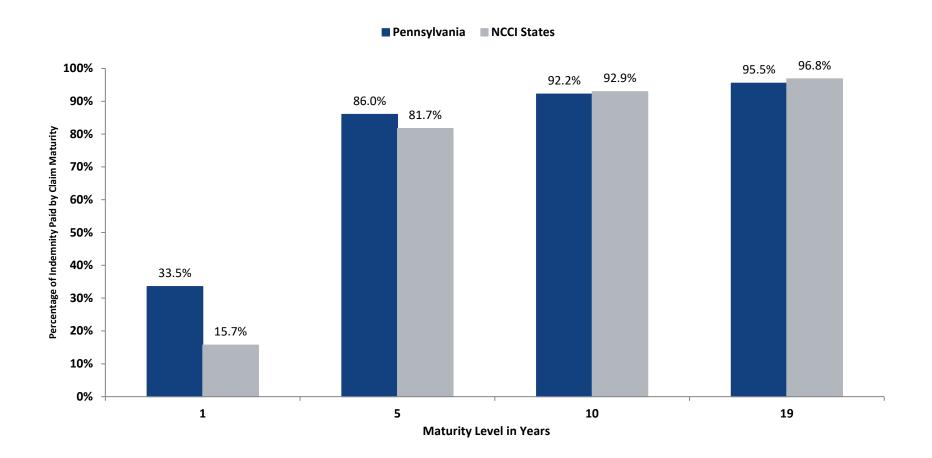


The rate at which claims are settled and closed impacts the ultimate claim costs. The chart shows the percentage of indemnity claims that are closed at each report level. Approximately 3% of indemnity claims remain open at 5th report.

Source:

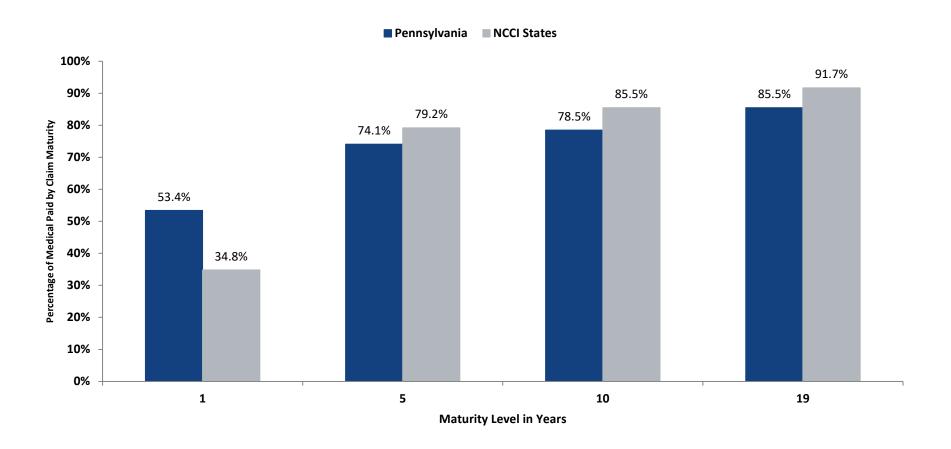
PCRB 2021 Loss Cost Revision

Portion of Ultimate Indemnity Loss Paid by Claim Maturity



<u>Sources:</u> PCRB 2021 Loss Cost Revision, on a Policy Year basis NCCI States: April, 2021, Annual Statistical Bulletin, Interim Exhibits, on an Accident Year basis

Portion of Ultimate Medical Loss Paid by Claim Maturity

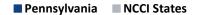


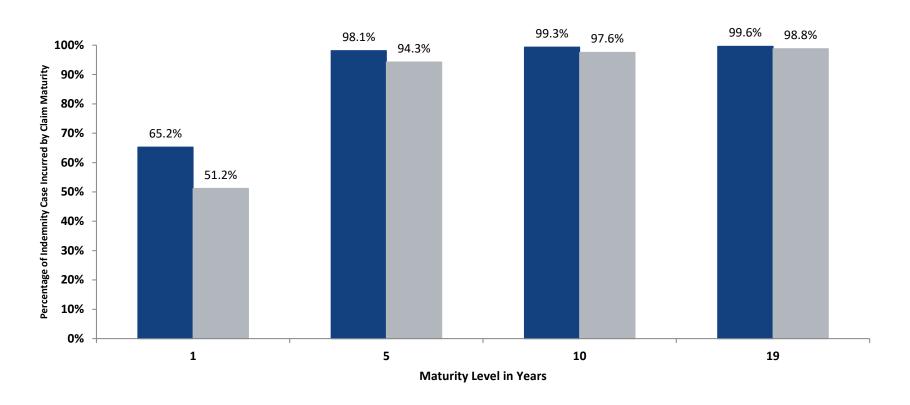
Sources:

PCRB 2021 Loss Cost Revision, on a Policy Year basis

NCCI States: April, 2021, Annual Statistical Bulletin, Interim Exhibits, on an Accident Year basis

Portion of Ultimate Indemnity Case Incurred by Claim Maturity



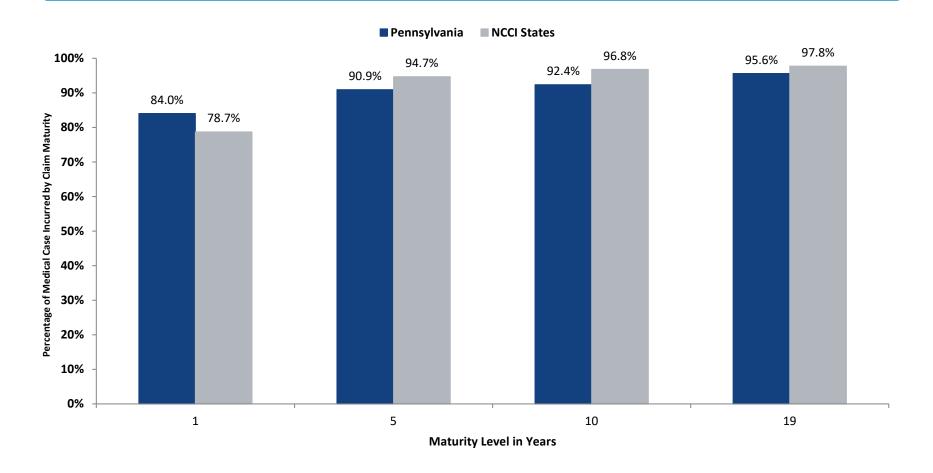


Sources:

PCRB 2021 Loss Cost Revision, on a Policy Year basis

NCCI States: April, 2021, Annual Statistical Bulletin, Interim Exhibits, on an Accident Year basis

Portion of Ultimate Medical Case Incurred by Claim Maturity



<u>Sources:</u> PCRB 2021 Loss Cost Revision, on a Policy Year basis NCCI States: April, 2021, Annual Statistical Bulletin, Interim Exhibits, on an Accident Year basis