

# Trends in Absence Time and Payments Due to Long- and Short-Term Disability and Workers' Compensation for Employees with Osteoarthritis in the United States

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## Background

- United States (US) employee benefits include:
  - Sick Leave (SL) for paid time off, generally without a specific reason.
  - Short- and Long-term Disability (STD and LTD, respectively) for non-work-related injuries/illnesses.
  - Workers' Compensation (WC) for work-related injuries/illnesses.
- Absences due to SL, STD, LTD, and WC can have significant impact on business performance.
- Employers are intensifying efforts to manage these benefits and make connections with employee health.
- The 2020 Kaiser Family Foundation survey on employer health benefits<sup>1</sup> provides an excellent overview of typical employer coverage for direct medical and prescription costs.
  - It did not include any information on Sick Leave, Short- and Long-term Disability or Workers' Compensation.
- Published research on absence costs and lost time often inappropriately uses:
  - Proxies and subjective data (from surveys) to estimate absences, which:
    - Are subject to recall issues.
    - May report absences or impairments that didn't occur during their work hours.
  - Constant dollars and fixed salary-replacement percentages to estimate absence costs across benefits and diseases.
- This study compares all-cause STD, LTD, and WC utilization and explores changes from baseline for employees with osteoarthritis.

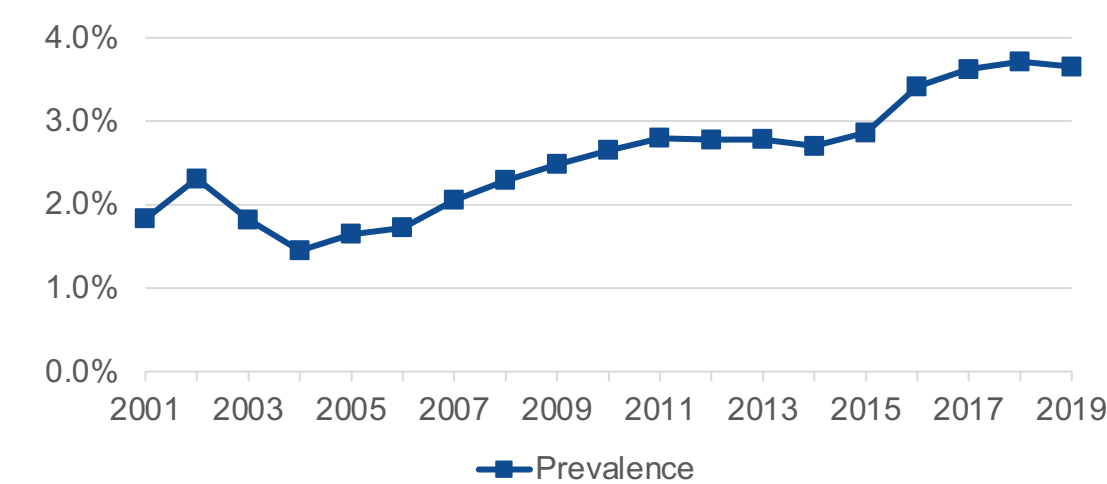
## Study Population

- US employees within the Workpartners (formerly HCMS) Research Reference Database (RRDb) from 2001—2019.
- Workpartners RRDb contains:
  - Medical and pharmaceutical claims for over 3 million employees and dependents.
  - Enhanced employee demographics (including self-reported race).
  - Job-related employee information (salary, job type, full/part-time status, exempt/non-exempt status).
  - Employees in all states.
  - Claims with absence durations and payments for employee populations eligible for STD=1.2 million, LTD=1.1 million, WC=1.4 million, SL=710,000.
- The Workpartners RRDb has been used for research in:
  - Rheumatoid arthritis<sup>2</sup> and gout<sup>3,4</sup>.
  - Specialty pharmacy-managed conditions such as Hepatitis-C<sup>5,6</sup> and acromegaly<sup>7</sup>.
  - Various other conditions.

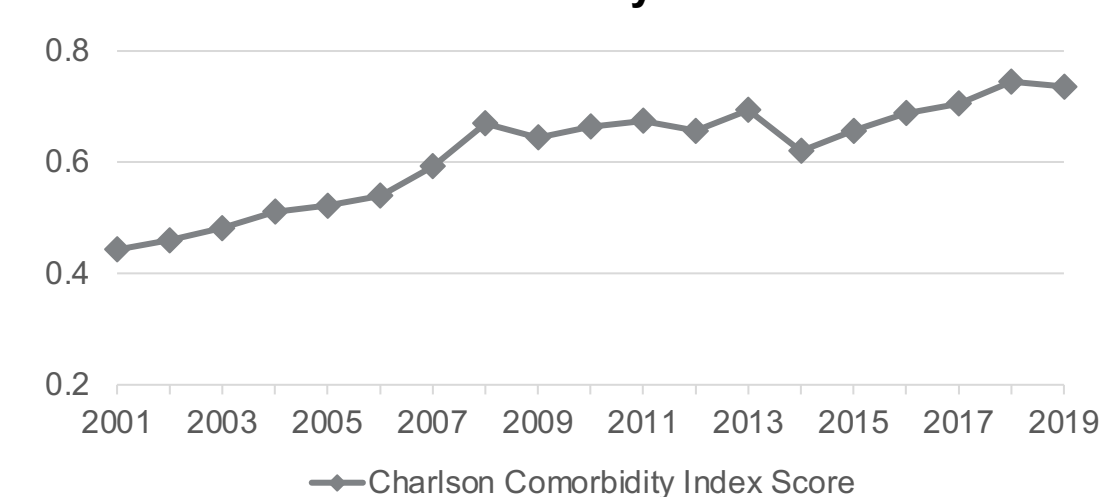
## Methods

- Retrospective analysis of US employees in each year with medical claims in the Workpartners RRDb from the US Agency for Healthcare Research and Quality (AHRQ) osteoarthritis category.
- For osteoarthritis, each year the analysis focused on:
  - The prevalence and Charlson Comorbidity Index score<sup>8</sup> for each year's population.
  - The percent of eligible employees utilizing each benefit.
  - Mean leave length (in days).
  - Median payments as a percent of salary.
- Short- and Long-term Disability and Workers' Compensation payments included lump-sum distributions and potentially extended beyond the year initially incurred.
- Workplace accidents were paid under the Workers' Compensation benefit.
- Excluded claims:
  - Workers' Compensation claims without absence from work (medical only).
  - Sick Leave claims may be taken for any reason and were excluded.
- All employees' absences were aggregated based on the initiation year.
- For each benefit, average leave-length and median payment were calculated and compared with baseline (2001).

### Annual Disease Prevalence

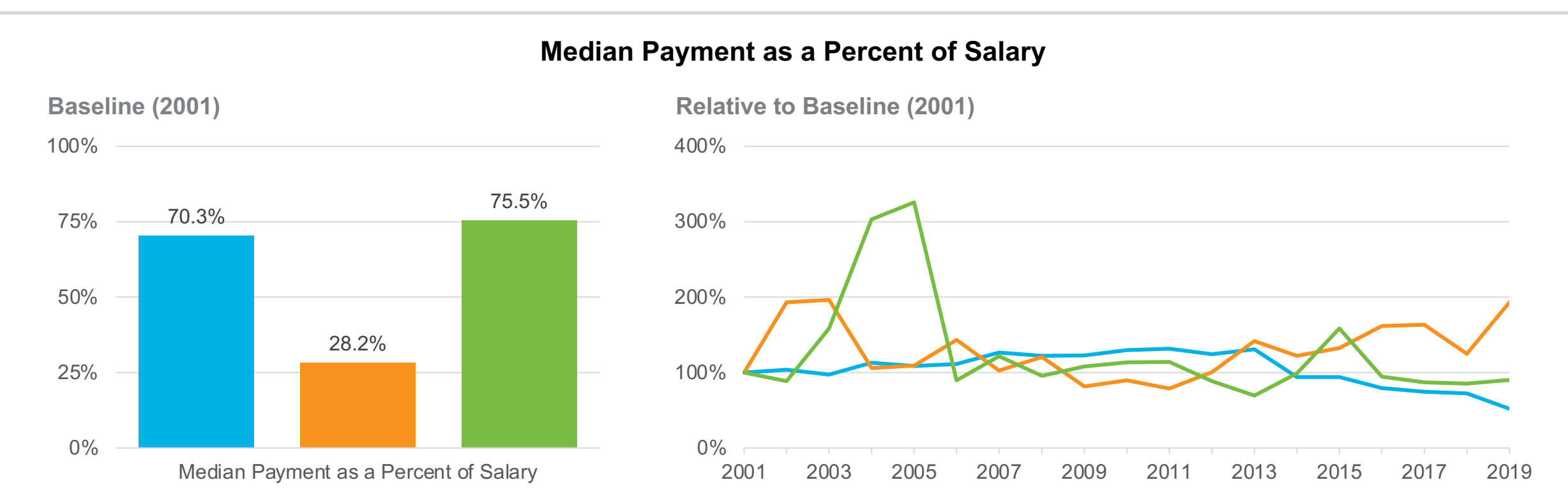
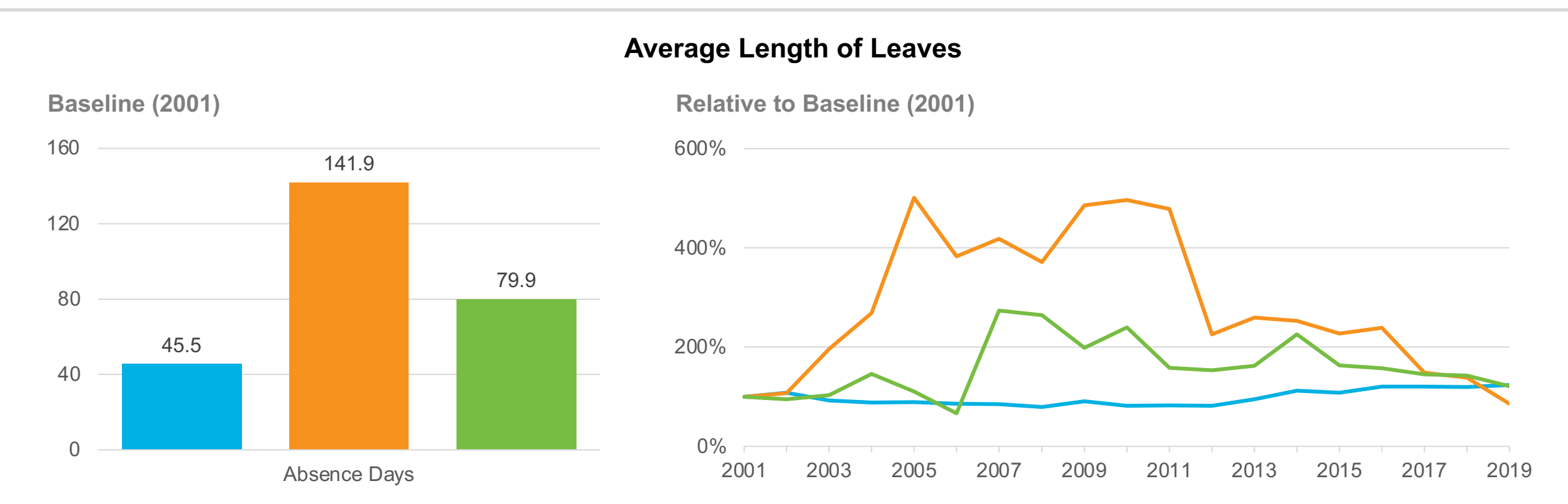
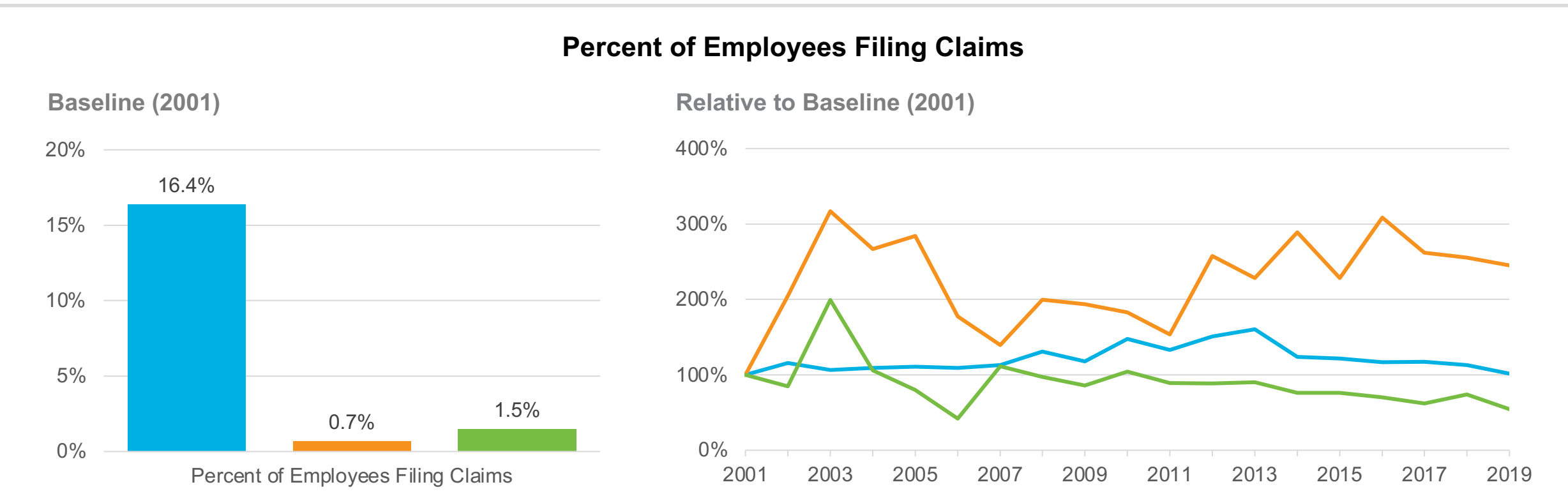


### Annual Charlson Comorbidity Index Scores



## Results

Legend: Short-term Disability (Blue), Long-term Disability (Orange), Workers' Compensation (Green)



## Most Impacted Years

	STD	LTD	WC
Highest median payments	2011	2003	2005
Longest claim lengths	2019	2005	2007

## Conclusions

- The percent of employees with osteoarthritis has been increasing since 2004 and the percent of employees filing claims varies by benefit.
- For each benefit, the leave lengths and payments as a percent of salary vary over time.
- Using a constant cost or salary replacement factor over time for all benefits is not accurate or appropriate.

## Implications for Policy or Practice

- Coordination of benefits is important.
- Analysis of the impact of workplace accident and disability leaves and payments by use of a constant salary-replacement factor is inappropriate.
- Person-level data by year and benefit should be used.

## References

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