Case Study: Quantifying Economic Damages from Loss of Employer-Sponsored Health Insurance (ESI)

Overview and Relevance

This case study applies quantitative economic analysis to estimate damages in wrongful termination, ERISA, and disability cases. Using nationally representative survey data, I measure the causal impact of losing employer-sponsored health insurance (ESI) on health care access, out-of-pocket costs, and work productivity. The work mirrors litigation consulting practice—cleaning and analyzing large datasets, applying accepted econometric methods, and translating results into defensible monetary damages—while adhering to FRE 702 and *Daubert* standards.

Purpose

Quantify the economic consequences of involuntary ESI loss and provide a framework to translate these impacts into case-specific damages. The results can be directly integrated into annual and lifetime damages models for plaintiffs facing involuntary job loss or benefit terminatio

Summary of Findings

Comparing individuals who lost ESI to a matched group who retained it, I find:

- **Reduced productivity:** Days not worked per quarter rose by about 10%, from an average of 4.4 to 4.9 days ($p < 0.05$).
- **Delayed medical care:**
  - Delayed dental care increased from 16% to 24% ($p < 0.01$).
  - Delayed needed medical care increased from 9.5% to 17% ($p < 0.05$).
  - Prescription delays rose from 4.3% to 7.7% (directionally consistent, not statistically distinguishable at the 5% level).
- **Financial strain:**
  - Avoided care due to cost increased from 5.6% to 10.6% ($p < 0.05$).
  - Annual out-of-pocket medical spending increased by roughly 10% (directionally consistent, not statistically distinguishable at the 5% level).

Results are robust to demographic and health controls, year and region fixed effects, and MEPS complex survey design.

Methodology

Design: Person-round panel using a Difference-in-Differences (DiD) estimator with year and region fixed effects; controls include demographics, income, education, self-reported health, and employment status.
Sample: U.S. adults aged 18–64 in MEPS 2018–2019, excluding Medicare-eligible individuals.
Treatment Definition: ESI at baseline, uninsured for $\geq$1 full round; voluntary transitions to other coverage excluded.
Control Group: Continuous ESI coverage in all observed rounds.

Damages Framework

Productivity Loss (Primary)

Monetary damages are based on the increase in missed workdays:

$$\text{Annual Productivity Damages} = [4.42 \times 0.104] \times 4 \times \text{Daily Wage (+Fringe)}$$

Example: An increase of 0.46 days/quarter $\Rightarrow$ 1.84 days/year. At \$400/day, this equals approximately \$736/year before fringe and interest.

Medical Out-of-Pocket (Supportive)

$$\text{Annual OOP Damages} = \$1{,}223.75 \times 0.10 \approx \$122.38$$

Supportive damages can be added for claimants with relevant records.

Employer Contributions (If Claimed)

Add the employer's monthly health-benefit contribution for each uncovered month.

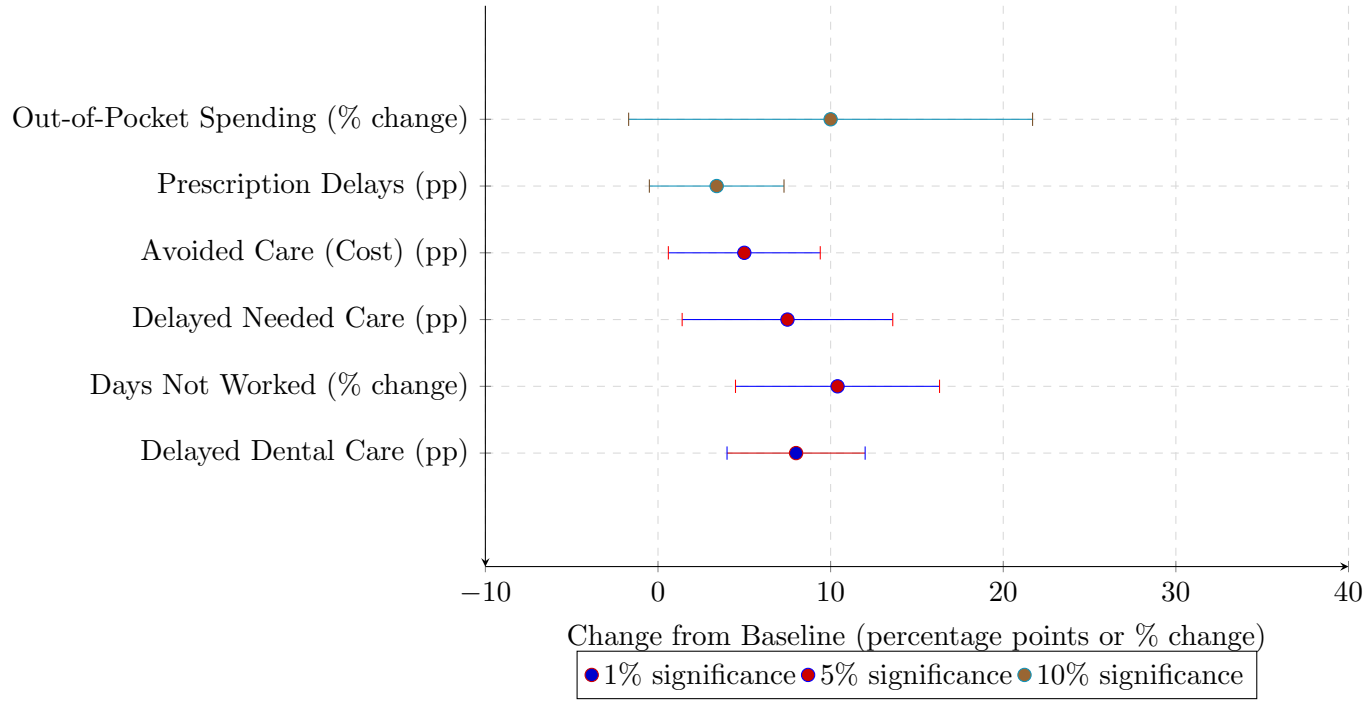
Limitations

- Results are based on MEPS 2018–2019; effects may differ in other periods or populations.
- MEPS includes self-reported measures, which may be subject to recall bias.
- The public-use MEPS file does not include detailed location information (e.g., state or county).
- The DiD approach assumes parallel trends in the absence of treatment.
- Damages examples use illustrative parameters; adjust for case-specific facts.

Application Notes

- Annualize damages for multi-year claims.
- Apply prejudgment interest and discounting per forum rules.
- Present low/central/high scenarios around statistically significant estimates.

Exhibit 1: Estimated Impacts of ESI Loss (Change from Baseline)



Note: For binary outcomes, values represent percentage point (pp) changes from the baseline prevalence. For continuous measures (Days Not Worked, Out-of-Pocket Spending), values represent percent (%) changes from the baseline mean. Whiskers are 95% confidence intervals with cluster-robust standard errors. Dark red = significant at 1%, dark blue = significant at 5%, light blue = marginally significant at 10%.