UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

San Francisco Division

DJENEBA SIDIBE, et al.,

Plaintiffs,

v.

SUTTER HEALTH,

Defendants.

Case No. 12-cv-04854-LB

DECLARATION OF DANIEL BOADA

Assigned to Hon. Laurel Beeler

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I. Introduction

1. My name is Daniel Boada. I am a Director in the Washington, DC office of Berkeley Research Group ("BRG"), an economic consulting firm. I have over a decade of experience conducting economic and statistical analysis in various industries, with an emphasis on healthcare. My prior clients span the healthcare industry, including physician groups, hospitals, health plans, pharmaceuticals, and consumers. My prior engagements involve the analysis of various topics including damages, valuation, anticompetitive conduct, and fraud. I received an MHS in Health Economics and Outcomes Research from Johns Hopkins University and an AB in Economics from Harvard University. My CV is attached as **Exhibit A**. I have knowledge of the facts set forth herein, and if called to testify as a witness thereto, I could do so competently and under oath.

2. I have worked on this matter in support of Plaintiffs' expert, Dr. Tasneem Chipty, since 2017. My involvement included all aspects of the economic analysis relevant to Plaintiffs' case, including analysis of market definition, market power, tying, anticompetitive impact, pass-through, class certification, and damages. In that capacity, I reviewed hundreds of ordinary course documents, depositions, and trial transcripts. My assignment included analyzing and processing data produced by health insurers, which contained hundreds of millions of claims and premium records for California residents spanning more than a decade. My responsibilities also included the design and execution of a regularized regression used to impute missing diagnosis information from claims data, sensitivity analysis for econometric models studying hospital overcharges, and estimation of regression models used to measure pass-through from medical costs to premiums.

3. I have been provided with copies of the Proposed Plan of Distribution ("Plan") and the Proposed Settlement Agreement ("Settlement Agreement" or

"Settlement") in the above-captioned matter.[1] I understand that the Plan proposes a methodology for allocating the funds stipulated in the Settlement Agreement ("Settlement Fund") to claimants defined in the Plan ("Authorized Claimants").

4. I was engaged by Constantine Cannon LLP ("Class Counsel") to assess the Plan relative to available economic data and literature. As part of this assignment, I reviewed academic articles, prior expert reports, publicly available data, and data produced in discovery, among other materials. A full inventory of materials relied upon in forming my opinions is attached as **Exhibit B.**

5. BRG is compensated at a rate of $600 per hour for my services in this matter. Neither BRG's nor my compensation depend upon the outcome of this dispute. My opinions rely on work performed by me and those under my supervision. I reserve the right to modify my opinions as additional information becomes available.

II. Summary of Opinions

6. Based on my review of the Plan and the additional materials described above, I reach the following conclusions:

7. **Allocating settlement funds *pro rata* based on premiums paid is consistent with economic data and academic literature.** Specifically, available data and literature confirm:

a. *The alleged harm directly concerns premiums*. The alleged overcharges in this case are premium overcharges, which is consistent with economic research suggesting that health system pricing impacts health insurance spending by consumers.

b. *Premiums account for variation in coverage and over time*. Claimants likely vary across several dimensions including health plan, coverage

[1] "Proposed Plan of Distribution," *Sidibe et al. v. Sutter Health*, N.D. Cal., Case No. 3:12-cv-4854-LB, filed April 25, 2025. *See also* "Proposed Settlement Agreement," *Sidibe et al. v. Sutter Health*, N.D. Cal., Case No. 3:12-cv-4854-LB, filed April 25, 2025.

type, and time in the class. Premium-based allocation helps account for this variation and any associated variation in the alleged harm.

8. **Estimating premiums paid in the absence of exact subscriber-level premium data comports with standard practice in economics and statistics.** Again, available data and literature verify:

a. *Exact premium data are not available for all claimants*. Though a large amount of premium and contact data were produced by health insurers, my review confirms that exact premiums cannot be measured for all claimants. Given the large number of potential claimants, systematically collecting these data is likely to be burdensome and, in many cases, impossible. For example, some data are held not by health plans, but rather by employers who split premiums with their employees. For some claimants, former employers may no longer be in business or may not have records dating back to 2011.

b. *Estimating premiums is common in economic research*. Economists routinely estimate or even simulate premiums in the absence of detailed, population-level data. The approach outlined in the Plan is consistent with this practice.

c. *The estimation approach captures important factors related to premium payment*. Premiums vary materially along dimensions such as health plan (e.g., whether Blue Shield or Aetna), product type (e.g. whether HMO or PPO), and coverage type (e.g., whether single or family). The information available to the class administrators allows estimation based on each of these key factors, among others.

d. *The estimation approach accommodates corrections from claimants who can provide more accurate information*. If claimants believe their premiums are incorrectly estimated, the Plan allows them to provide class administrators with updated information which will be reflected in the final allocation.

9. **The proposed default allocation used to estimate premiums for employers and employees on group-based plans is supported by data and economic literature**. Multiple sources validate that:

a. *The proposed default premium allocation between employers and employees are based on reliable data used in peer-reviewed academic studies*. Data from the Kaiser Family Foundation and the Bureau of Labor Statistics support the employer-employee split stipulated in the Plan. These same sources are routinely relied on in peer-reviewed academic research in health economics.

b. *Employee contribution percentages are often similar over time and across industries.* Analysis of these same data confirm that variation over the class period and across industries is often small or statistically insignificant. This supports their use across claimants in the proposed Plan.

10. In sum, **I find that the details of the proposed plan are economically reasonable in that they are grounded in available economic data and peer-reviewed academic literature**.

11. The remainder of this declaration proceeds as follows. **Section III** reviews the premium basis for allocation. **Section IV** examines the estimation of premiums in the absence of complete premium data. **Section V** studies a key component of that premium estimation: the proposed employer-employee split for group-based premiums. **Section VI** concludes.

III. The Proposed *Pro Rata* Allocation Based on Premiums Is Consistent with Economic Data and Academic Literature

A. The Allocation Reflects the Economic Theory of the Alleged Harm

12. Premium-based allocation provides a natural starting point for distributing the Settlement Fund because the alleged harm in this case is a premium

overcharge.[2] Dr. Tasneem Chipty, expert for the Class, submitted several expert reports outlining this theory in detail and ultimately estimated premium damages using the same third-party health plan data underlying the Plan's proposed settlement allocation.[3]

13. This theory is consistent with academic literature suggesting that hospital pricing impacts health insurance premiums. Cutler and Morton (2013) state that price increases following hospital consolidation can lead to higher health insurance spending by consumers.[4] Boozary et al. (2019) analyze the association between hospital market concentration on insurance premiums in Affordable Care Act (ACA) Marketplaces, finding that areas with high hospital market concentration had annual premiums that were five percent higher on average.[5] Dafny (2021) surveys literature on provider consolidation and concludes that higher provider prices related to consolidation harms commercial insured plan members through higher premiums.[6]

14. For these reasons, a premium-based approach to allocating the Settlement Fund in this case is well-grounded in both data specific to this dispute and the broader literature in health economics.

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[2] "Fourth Amended Complaint," *Sidibe et al. v. Sutter Health*, N.D. Cal., Case No. 3:12-cv-4854-LB, filed September 29, 2017, ¶ 2 ("plaintiffs…incurred these overcharges in the form of inflated insurance premiums").

[3] *E.g.*, Expert Report of Dr. Tasneem Chipty, April 22, 2019, ¶ 7 ("My empirical analysis…relies upon these data systems which comprehensively reflect inpatient claims and member premiums for the Class Health Plans in Northern California").

[4] Cutler, David and Fiona Scott Morton, 2013, "Hospitals, Market Share, and Consolidation", *Journal of the American Medical Association*, Vol. 310, No. 18: 1964-1970, p. 1967 ("[Health system] price increases affect consumers directly in their out-of-pocket payments when they buy insurance").

[5] Boozary, Andrew, Yevgeniy Feyman, Uwe Reinhardt, and Ashish Jha, 2019, "The Association Between Hospital Concentration and Insurance Premiums in ACA Marketplaces," *Health Affairs*, Vol. 38, No. 4: 668-674, p. 668 ("We found that areas with the highest levels of hospital market concentration had annual premiums that were, on average, 5 percent higher than those in the least concentrated areas").

[6] Dafny, Leemore S., "How Health Care Consolidation Is Contributing to Higher Prices and Spending, and Reforms That Could Bolster Antitrust Enforcement and Preserve and Promote Competition in Health Care Markets," Testimony Before the U.S. House Committee on the Judiciary, Subcommittee on Antitrust, Commercial and Administrative Law, Apr. 2021, available at https://docs.house.gov/meetings/JU/JU05/20210429/112518/HHRG-117-JU05-Wstate-DafnyL-20210429.pdf, site accessed April 16, 2025, p. 9 ("The higher provider prices fueled by consolidation harm commercially insured plan members, both directly through higher out-of-pocket spending and higher premiums and indirectly through lower wages").

B. The Allocation Accounts for the Impact of Variation in Health Plan, Product, and Coverage Characteristics Across Claimants

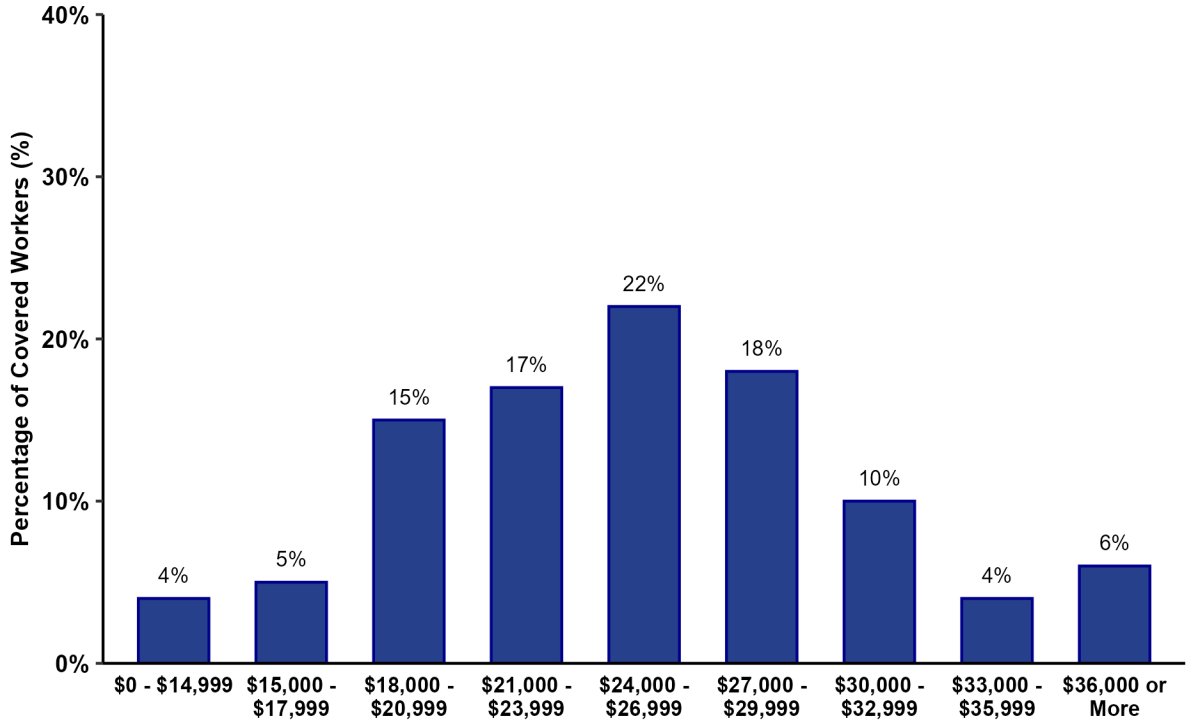
15. Health insurance premiums are variable, as illustrated below in **Figure 1**. This variation reflects factors including (a) the health plan that provided the coverage and was paid the premium (e.g. Blue Shield versus Aetna); (b) coverage type (e.g. single coverage versus family coverage); (c) product type (e.g. HMO vs PPO); (d) coverage level (e.g. gold vs bronze); and (e) year (average premiums have increased over time, as discussed further below).

16. Premium-based allocation will correlate with any variation in alleged harm along these same dimensions. As a result, the allocation compensates claimants consistently while accounting for varying experience across class members and over time.

17. This approach resembles the allocation in at least one previously approved class action settlement.[7] I understand that the prior settlement resembles the present case in alleging premium overcharges and in relying on health plan data to support distribution to claimants.

[7] "Proposed Plan of Distribution", *In re: Blue Cross Blue Shield Antitrust Litigation MDL 2406*, N.D. Ala., Master File No. 2:13-cv-20000-RDP, filed March 12, 2021. *See also* Declaration of Darrell Chodorow, *In re: Blue Cross Blue Shield Antitrust Litigation MDL 2406,* N.D. Ala., Master File No. 2:13-cv-20000-RDP, filed October 30, 2020.

Figure 1: Variation in Family-Coverage Premiums
2024 KFF Employer Health Benefits Survey



Source: Kaiser Family Foundation 2024 Employer Health Benefits Survey.
Notes:
1. The sample for the survey includes private firms and nonfederal government employers with three or more employees.
2. The universe for the survey is defined by the U.S. Census' 2020 Statistics of U.S. Business (SUSB) for private firms and 2022 Census of Governments (COG) for non-federal public employees.

IV. Premium Estimation in the Absence of Claimant-Level Data Comports with Standard Practice in Economics and Statistics

A. Exact Premium Data Are Not Available for All Claimants

18. Third-party health plans produced over two hundred million records of premium and contact data as part of discovery in this matter.

19. Despite the substantial volume of data provided, exact premiums cannot be derived for every potential claimant, for various reasons including but not limited to the following:

a. *Aggregation of premiums*. For certain health plans and lines of business, premiums are not reported at the individual subscriber level. For example, a health plan may only record the total premiums received from an employer, without any record of how those premiums were divided between the employer and each of its employees.

b. *Incomplete Identifiers*. In some instances, records from premium data do not link to contact data records. This means that, while those records do not identify precisely who paid that premium, despite indicating how much of a premium was paid. For example, premium data may record $1,000 paid by a subscriber with account number 12345, but the contact information does not list a subscriber with that account number.

c. *Incomplete Premium Information*. Premium data are incomplete for some of the approximately three million potential claimants in this case.

20. Requiring a systematic collection of premium information from all claimants is not a practical remedy for the issues described above. For example, certain employer claimants may no longer be in business,[8] and employee or individual market claimants may not maintain complete records of premium payments dating back to 2011. Employers also routinely update or replace databases of employee information and are only required to maintain most employee records for one to six years after employment ends.[9]

21. It would also take substantial time for health plans to produce any further information where there might be gaps. I understand from Class Counsel that it took many months for the health plans to produce the data elicited to date.

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[8] As pointed out in prior related settlements, the survival rate of businesses reported by the United States Bureau of Labor Statistics (BLS) illustrates this issue. BLS data indicate that 35.1 percent of business started in 2011, the first year of the class period in this case, survived until 2021, the last year of the class period in this case. BLS, "Table 7 – Survival of Private Sector Establishments by Opening Year," available at https://www.bls.gov/bdm/us_age_naics_00_table7.txt, site accessed April 20, 2025.

[9] *See,* United States Chamber of Commerce, "A Guide to Employee Record Retention," available at https://www.uschamber.com/co/run/human-resources/employee-record-retention-guide, site accessed April 23, 2025.

Furthermore, I understand that such data were only produced after extensive negotiations between health plans and Class Counsel, including substantial payments to health plans to cover the time and expense of production.

22. For these reasons, estimating premiums paid using the substantial data provided by each health plan is efficient and will result in quicker and larger recoveries for claimants.

B. Estimating Premiums Is Common Practice in Health Economics

23. Economists routinely estimate premiums from samples or subsets of data. In fact, both the Bureau of Labor Statistics' National Compensation Survey ("NCS") and the Kaiser Family Foundation Employer Health Benefits Survey ("EHBS"), discussed in greater detail below, estimate premiums based on sample data in their annual reporting. In some cases, economists will even simulate premiums data with statistical techniques.[10] Economists also regularly impute data, including premiums, when available information is incomplete.[11]

24. The premium estimation proposed in the Plan relies on the same principles. As discussed further below, it also leverages several key variables from health plan data together with information submitted by claimants on their claim forms to produce premium estimates that capture key sources of premium variability.

C. The Estimation Approach Captures Key Dimensions of Premium Payment

25. Data available for use in premium estimation vary by health plan but generally include market (i.e., individual or group insurance), employer, coverage

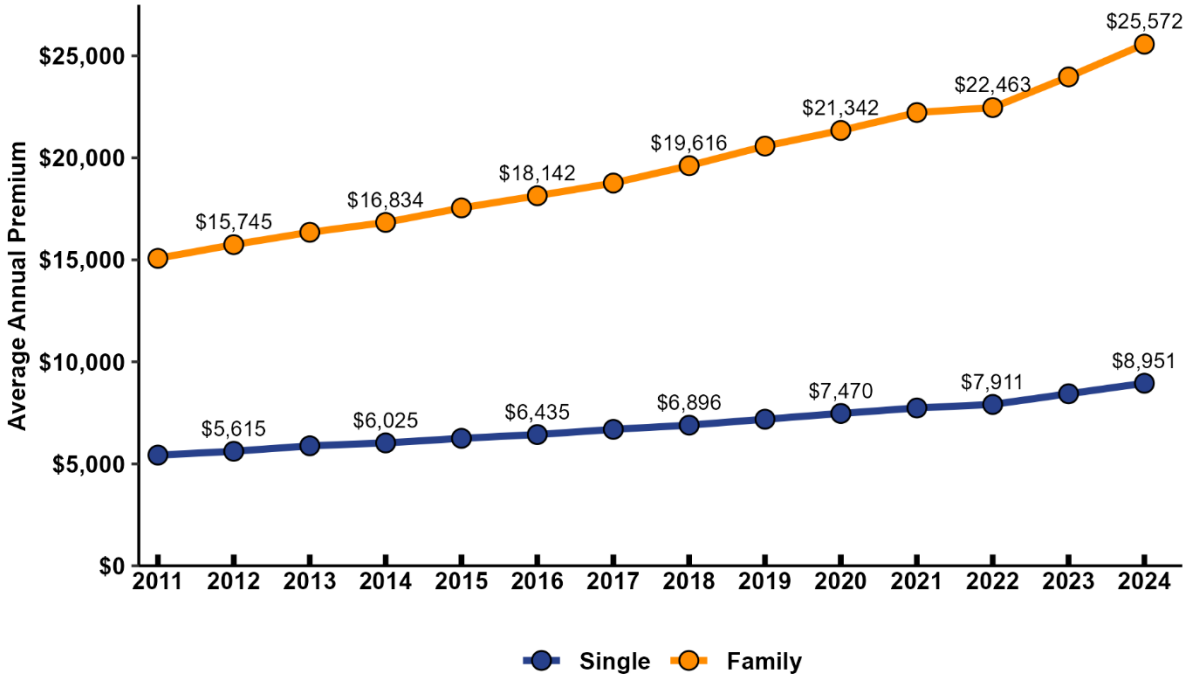
[10] *See, e.g.,* Gowrisankaran, Gautam, Aviv Nevo, and Robert Town, 2015, "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry," *American Economic Review*, Vol. 105, No. 1: 172-203.

[11] *See*, *e.g.,* Janicki, Hubert, Brett O'Hara, and Alice Zawacki, 2013, "Comparing Methods for Imputing Employer HEA Contributions in the Current Population," Census Bureau Study Paper, CES-WP-13-41.

type, and year of coverage, among other variables. These data also include or permit the estimation of the number of covered members, in the case of family coverage.

26. These features capture substantial sources of premium variation. For example, **Figure 2** below shows that premiums vary by year and coverage type, both of which are incorporated into the premium estimation. As discussed in more detail below, variation in employee contribution towards coverage, in the case of group-based insurance, is also reflected in the estimate.

Figure 2: Variation in Premiums Over Time
2024 KFF Employer Health Benefits Survey



Source: Kaiser Family Foundation 2024 Employer Health Benefits Survey.
Notes:
1. The sample for the survey includes private firms and nonfederal government employers with three or more employees.
2. The universe for the survey is defined by the U.S. Census' 2020 Statistics of U.S. Business (SUSB) for private firms and 2022 Census of Governments (COG) for non-federal public employees.

27. For these reasons, allocation of estimated premiums is supported by available economic data in addition to the academic literature described above.

D. The Estimation Approach Allows Claimants to Update Their Premiums

28. Should claimants find that their estimated premiums are understated, the proposed Plan offers a mechanism for them to update their data with class administrators before the Settlement Fund is disbursed. This remedy helps to decrease the potential for measurement error resulting from the estimated allocation without discouraging participation from claimants who may not have historical records available.

V. The Proposed Allocation of Group Premiums Between Employers and Employees Is Grounded in Reliable Data

29. A key component of premium estimation under the proposed Plan is the estimation of the employer-employee split for group-based premiums. For example, if health plan data allocate $10,000 in premiums for an employee's family coverage, the final step of the estimation would value the employee's contribution at $2,900 (29 percent) and the employer's contribution at $7,100 (71 percent). If the same employee had single coverage, their estimated premium contribution would be $1,800 (18 percent) and their employer's corresponding contribution would be estimated at $8,200 (82 percent).

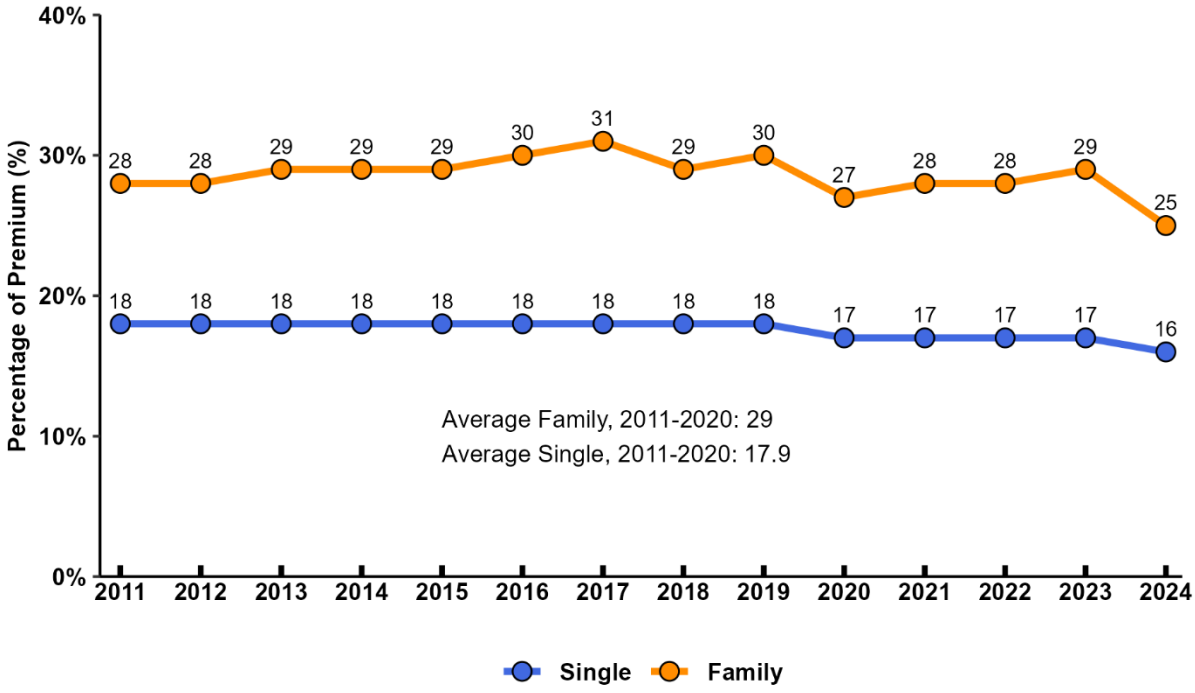
A. The Allocation Relies on Data Used in Peer-Reviewed Academic Studies

30. **Figure 3** below illustrates the data underlying these proposed splits. These data are drawn from the Kaiser Family Foundation EHBS, a widely cited data source relied upon in multiple academic studies. For example, Jacobs et al. (2009) use EHBS data to study health insurance demand.[12] Cutler (2003) uses EHBS to

[12] Jacobs, Paul D., 2009, "Health Insurance Demand and the Generosity of Benefits: Fixed Effect Estimates of the Price Elasticity," *Forum for Health Economics and Policy*, Vol. 12, No. 2, Article 3.

study longitudinal premium trends.[13] Liu and Sydnor (2022) use EHBS data to study the dominance of high-deductible health plans.[14] These data were also relied upon to support premium allocation in a previous class action settlement.[15]

Figure 3: Employee Contribution to Premium by Coverage Type
2024 KFF Employer Health Benefits Survey



Source: Kaiser Family Foundation 2024 Employer Health Benefits Survey.
Notes:
1. The sample for the survey includes private firms and nonfederal government employers with three or more employees.
2. The universe for the survey is defined by the U.S. Census' 2020 Statistics of U.S. Business (SUSB) for private firms and 2022 Census of Governments (COG) for non-federal public employees.

31. The EHBS data are also corroborated by similar data reported by the Bureau of Labor Statistics' National Compensation Survey ("NCS"). The NCS data

[13] Cutler, David M., 2003, "Employee Costs and the Deline in Health Insurance Coverage," *Frontiers in Health Policy Research Volume 6*, Article 3: 27-53.

[14] Liu, Chenyuan and Justin Sydnor, 2022, "Dominated Options in Health Insurance Pans" *American Economic Journal: Economic Policy* Vol. 14, No. 1: 277-300.

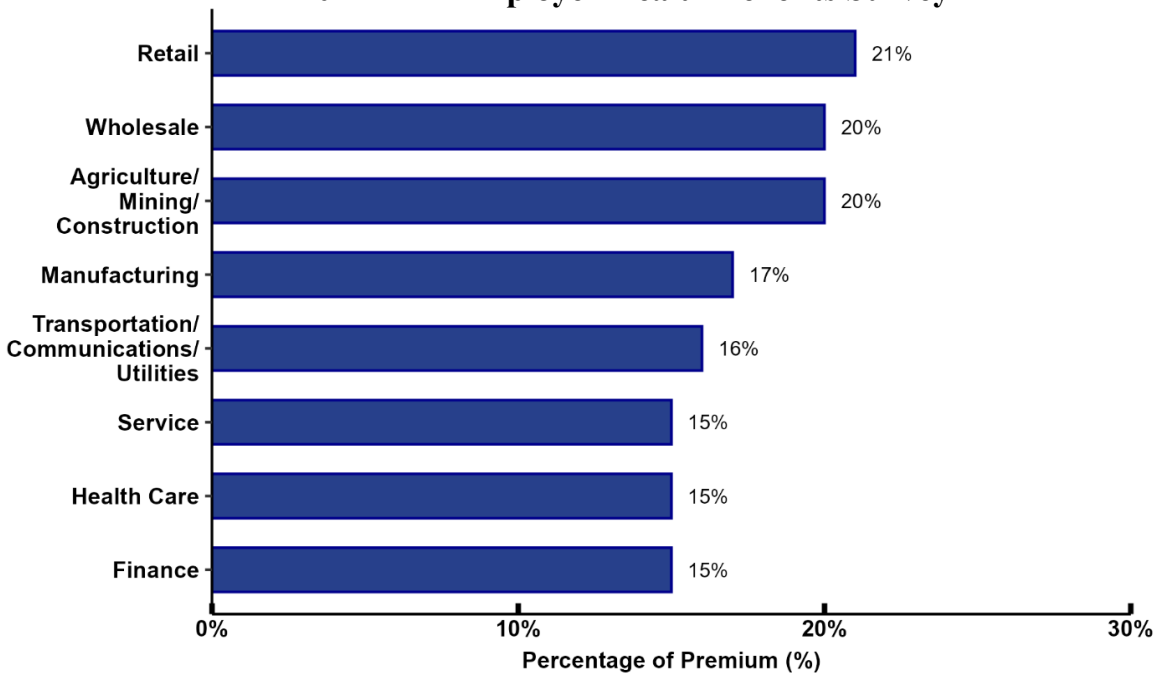
[15] Declaration of Darrell Chodorow, *In re: Blue Cross Blue Shield Antitrust Litigation MDL 2406,* N.D. Ala., Master File No. 2:13-cv-20000-RDP, filed October 30, 2020.

generally fall within one to two percentage points of the KFF results and exhibit similar stability over time.[16]

B. The Allocation Relies on Data That Are Stable Over Time and Across Industries

32. As illustrated above in **Figure 3**, employer contributions to premiums are relatively consistent over time. A similar point is illustrated below in **Figure 4**, which shows that these contributions fall within a narrow band across industries. [17]

Figure 4: Employee Contribution to Premium by Industry
2024 KFF Employer Health Benefits Survey



Source: Kaiser Family Foundation 2024 Employer Health Benefits Survey.
Notes:
1. Excludes "All Industries" and "State/Local Government" categories.
2. The sample for the survey includes private firms and nonfederal government employers with three or more employees.
3. The universe for the survey is defined by the U.S. Census' 2020 Statistics of U.S. Business (SUSB) for private firms and 2022 Census of Governments (COG) for non-federal public employees.

[16] BLS, 2024, "Employee Benefits in the United States, March 2024," available at https://www.bls.gov/ebs/publications/employee-benefits-in-the-united-states-march-2024.htm, site accessed April 17, 2025.

[17] The EHBS report includes multiple statistical significance tests examining whether the estimated contribution in each year differs from the average across all years, and likewise for industries. The majority of these results, as reported, are not statistically significant at the $\alpha = 0.05$ level.

33. This consistency supports the approach in the Plan, which applies a common employer-employee split across claimants and lowers the burden on class administrators to efficiently estimate each claimant's premium allocation.

VI. Conclusion

34. In conclusion, I find that the Plan is economically reasonable based on its reliance on the best available economic data and its consistency with both economic theory and peer-reviewed academic literature.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 24th day of April 2025, in Pittsburgh, PA.

Daniel Boada