

A Comparative Analysis Study That Determines to What Degree Government and Employer-Sponsored Health Insurance Programs in The United States Provide Financial Benefit for those Accessing Healthcare

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ABSTRACT: This study examined government and employer-sponsored health insurance in the United States to determine if the financial benefits of health insurance outweigh economic costs. Utilizing data from the Agency for Healthcare Research and Quality (AHRQ), Kaiser Family Foundation (KFF), and other scholarly sources, the analysis revealed that approximately 80% to 90% of non-chronically ill insured individuals do not meet their annual deductible and may not receive financial benefit from health insurance. Why do so few financially benefit? Healthcare expenditures accumulated by the top 5% utilizers made up of mostly older age groups and those with chronic conditions accounted for 52.9% of the total spending. In other words, the top 5% utilizers of healthcare in the United States spent more on healthcare than the remaining 95% of the US population.

KEYWORDS: Employer-sponsored health insurance, premiums, deductibles, mandate, co-payments, coinsurance, healthcare expenditures, out-of-pocket, chronically ill, chronic conditions

I. INTRODUCTION

Employer-sponsored health insurance covers roughly 180 million people living in the United States (Keisler-Starkey & Bunch, 2022). Rising premiums and increased deductibles raise questions about financial value of health insurance, particularly for the non-chronically ill aged 25 -65 who typically have low healthcare utilization. This study set out to determine whether the financial benefits of health insurance exceed the financial costs for various segments of the insured. The study took into consideration deductible met, health status and expenditure variations based by age, race, ethnicity, and type of insurance.

In 2010, President Obama signed the Patient Protection and Affordable Care Act. A key component of this legislation was the individual mandate, a requirement to purchase a minimum amount of health insurance that was backed up with a financial penalty. In 2017, President Trump signed legislation that reduced that financial penalty to \$0 beginning in 2019. In 2020, the California legislature passed a law that created a state-wide individual mandate, because the federal mandate was no longer in effect. This individual mandate also includes financial penalties for failure to maintain health insurance. Several other states have individual mandates, but most do not.

Individuals in the United States may be required to purchase health insurance if they live in a state with a mandate. But for most residents, the decision to purchase health insurance is

based on personal and economic factors including the cost and real or perceived benefits.

According to the 2024 Health Benefits Survey, the average annual cost for health insurance coverage premiums for a family of four was \$25,572 and the average deductible amount was \$10,310 (McGough, et al, 2024). Most health insurance plans use co-payments, deductibles and coinsurance to reduce overutilization and to help cover the cost of care. Co-payments are a set amount that patients must pay for the service provided, often ranging from \$10 to \$100. A deductible is the amount the patient must pay out-of-pocket for their health services before health insurance coverage starts sharing the cost of care. Patients are typically responsible for the full or discounted cost of service until their deductible has been reached. According to Ryan (2015), more than 80% of the non-chronically ill insured don't reach their deductible in any given year, thus they receive no value from their health insurance.

II. RESULTS

Data sourced from the Medical Expenditure Panel Survey (Agency for Healthcare Research and Quality, 2020), a comparative expected value analysis study (Anderson et al, 2025), and additional insights were drawn from the Peterson-KFF Health System Tracker (McGough et al, 2024) as well as other peer-reviewed studies. The analysis excluded elective procedures and focused mostly on non-chronically ill individuals aged 25–65. Expenditures were examined by

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percentile, demographic characteristics, and service types, with costs compared against premiums and deductibles to assess financial value. Non-financial benefits were evaluated qualitatively based on literature discussing insurance’s role in risk mitigation and health outcomes (AHA, 2022).

Table 1: Overall Healthcare Expenditures				
Year	Top 1%	Top 5%	Top 10%	Top 50%
2020	24.2	52.9	68.6	97.4

Table 1 showed that healthcare expenditures in the U.S. are highly concentrated among a small segment of the population. In 2020, the top 1% of spenders accounted for 24.2% of total healthcare expenditures, with an average of \$151,839 per person, while the top 5% accounted for 52.9% of total healthcare expenditures, averaging \$66,405 per person.

Table 2: Average Amount Spent Per Person Percentile Rank					
Year	Top 1%	Top 5%	Top 10%	Top 50%	Overall
2020	151,839	66,405	43,036	12,210	6,266

In 2020, the healthcare spenders in the top 50% accounted for 97.4% of all healthcare care costs while the bottom 50% accounted for just 2.6% of total healthcare expenditures, with a mean of \$374 per person (AHRQ, 2020). The skewed distribution may be a result of low healthcare utilization by healthy individuals, who make up a large percentage of the bottom 50%.

Table 3: Percentile Rank Healthcare Expenditures			
Percentile	2020	2019	2018
Top 1 %	\$83,006	\$79,142	\$74,447
Top 5 %	\$27,380	\$27,919	\$27,171
Top 10 %	\$14,449	\$15,370	\$15,104
Lower 50 %	\$1,150	\$1,330	\$1,358

Most health insurance plans use co-payments, deductibles and coinsurance to reduce overutilization and to help cover the cost of care. Co-payments are a set amount that patients must pay for the service often ranging from \$10 to \$100. A deductible is the amount the patient must pay out-of-pocket for their health services before health insurance coverage starts sharing the cost of care. Patients are responsible for the full cost of services until the deductible amount has been reached. According to Ryan (2015), more than 80% of the non-chronically ill insured don’t reach their deductible in any given year, thus they most likely receive no value from their health insurance.

The Health Benefits Survey reported that the average annual cost for health insurance coverage premiums for a family of

four was \$25,572, mostly covered by the employer and employee with an average deductible amount of \$10,310 (McGough, et al, 2024). Therefore a family of four on average has an average fixed cost amount of \$25,572, paid by employer and employee, and variable costs of \$10,310 paid mostly by employees, which adds up to \$35,882 per household. According to Agency for Healthcare Research and Quality AHRC (2020), those ranked in top 10%, ranked by healthcare expenses, average \$14,449, which is almost \$10,000 less than the \$25,572 that employer and employee are paying for health insurance coverage each year. Therefore as many as 90%, that purchased health insurance coverage receive no or a negative net financial benefit. It is also possible that a large percentage of those who are in the top 10% may also receive little or no financial benefit for health insurance coverage.

The median healthcare expenditure for the U.S. population is low, reflecting minimal utilization by the healthy. In 2020, the bottom 50% spent less than \$1,313, with a mean of \$374 (AHRQ, 2020). For non-chronically ill employees aged 25–65, expenditures are likely within this range, as they typically have fewer healthcare needs. The median for adults aged 18–64 is estimated to be around \$1,000, though precise data for this subgroup is limited (AHRQ, 2020). This low median underscores the mismatch between high insurance costs and actual healthcare usage for healthy employees.

Table 4: Age Group and Expenditure Percentile Breakdown					
Age	Percent	Lower 50%	Top 50%	Top 10%	Top 5%
65+	17.7	6.9	28.6	40.6	40.2
45–64	25.0	20.5	29.5	32.9	34.9
18–44	35.2	41.8	28.7	20.5	19.9
0–17	22.1	30.9	13.2	6.0	5.0

According to a 2020 Agency for Healthcare Research and Quality Report shown in Table 4, age is highly correlated with healthcare spending. In 2019, individuals aged 65 and over, who comprised 16.7% of the population, accounted for 40.5% of the top 5% spenders, reflecting higher healthcare needs due to age-related conditions. Those aged 45–64 (25.4% of the population) represented 35.5% of the top 5%, while those aged 18–44 (35.3%) made up only 19.6% (AHRQ, 2020). In 2021, people aged 55 and over accounted for 55% of total health spending, despite being 31% of the population (McGough, et al, 2024).

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Table 5: Ethnicity & Race Expenditure Percentile Rank					
Group	Overall	Low 50%	Top 50%	Top 10%	Top 5%
White	59.2	48.2	70.3	72.3	70.9
Hispanic	18.8	25.0	12.5	10.4	11.2
Black	12.5	15.3	9.6	10.1	11.2
Asian	9.5	11.5	7.6	7.2	6.8

Table 5 shows that racial and ethnic disparities in healthcare spending are evident. In 2019, White individuals (59.7% of the population) accounted for 70.6% of the top 5% spenders, while Hispanic individuals (18.5% of the population) accounted for only 10.3% of the healthcare expenditures, and Black individuals (12.3% of the population) accounted for 12.2% of healthcare expenditures (AHRQ, 2020). White individuals have higher average spending than other groups, possibly due to greater access to private insurance, which covers 75% of White and Asian individuals compared to 50% of Black and Hispanic individuals (McGough, et al, 2024). It is possible that Hispanic and Black individuals are more likely to be uninsured, which may result in a delayed care due to costs, contributing to lower expenditures. (McGough et al, 2024).

Expenditures vary by service type (AHRQ). In 2020, ambulatory events accounted for 41% of total healthcare expenditures but only 33% for the top 5% spenders, while inpatient stays comprised 21.7% overall and 32.3% for the top 5%. Prescription drugs represented 23% overall and 23.9% for the top 5%, indicating consistent spending across percentiles. According to the 2020 AHRQ Report home health represented 5.5% overall and 8% for top 5%, while dental/other services represented 8.9% overall and 2.8% for top 5% show varying importance by expenditure level.

Table 6: Expenditure by Service					
Group	Sum	Low 50%	Top 50%	Top 10%	Top 5%
Ambulatory	41.0	58.3	40.5	35.1	33.0
Drugs	23.0	11.8	23.3	24.1	23.9
Inpatient	21.7	0.0	22.2	29.6	32.3
Dental	8.9	29.6	8.4	4.0	2.8
Homecare	5.5	0.2	5.6	7.3	8.0

Ambulatory Event - More than 84% of all primary care physician office visits involve medication therapy (CDC, 2023). The co-payment to see a primary care doctor varies depending on the insurance plan and the type of service sought. Most health insurance policies require co-payments, which average \$25 (\$10 to \$50 range) for primary care visits

if the patient is insured and has met their deductible (AI, 2025). If the patient hasn't met their deductible they will pay the full allowable amount for the visit, which can be as much as \$100 or more. However, the out-of-pocket cost of primary care visit without insurance at CVS Minute Clinic (CVS.com) starts at \$59 for common illnesses and chronic conditions, \$75 at Teladoc.com for a standard telehealth visit and \$82 at MDLive.com and \$75 at Doctor on Demand (doctorondemand.com). Amazon Prime members can receive 24/7 on-demand care via Video Chat or Treat Me Now, In-app health records and care plans, Convenient prescription refill, secure messaging with a provider and renewal requests for \$99 a year by signing up on health.amazon.com. Amazon Prime members can add up to five family members for \$6/month each. The net financial benefit of having insurance would be \$10 (\$50 *.20) since only 20% of the insured have met their deductible. In 2018, only 30% of the insured had a primary care visit (Yang, 2023) resulting in an annual financial benefit of (\$10 * .30) of \$3.

The net financial benefit of having health insurance coverage for a primary care visit would be \$3 per year for those who have no insurance or those who have insurance and have not met their deductible. The insured who have not yet reached their deductible, which may be as much 80% of the population or more, often end up paying the same and often even more for their primary care visit than the uninsured. Therefore, health insurance for primary care visits for most does not provide economic value.

Prescription Drugs - The average co-payment is \$12 for first-tier drugs, \$36 second-tier drugs, \$65 for third-tier drugs, and \$128 for fourth-tier drugs for those with health insurance (McGough et al, 2024). Walmart's low-cost prescription program prices generic drug prescriptions starting at \$4 for a 30-day supply and \$10 for a 90-day supply for patients without insurance to treat diabetes, heart health, & blood pressure, mental health, digestion, thyroid, etc. (Walmart.com). The average co-payment of \$12 by the insured is \$2 more than the \$10 out-of-pocket cost for first-tier generic drug prescription so the insured received no economic benefit over uninsured.

Table 7: Payment Source and Expenditure Percentile					
Group	Sum	Low 50%	Top 50%	Top 10%	Top 5%
Private	42.5	48.9	42.3	42.1	42.8
Medicare	28.7	5.6	29.3	33.4	34.3
Cash	12.9	25.7	12.6	8.7	7.2
Medicaid	11.0	16.9	10.8	10.6	10.5
Other	5.0	3.0	5.0	5.1	5.3

According to the 2020 AHRQ Report, insurance type influences healthcare expenditure patterns. In 2019, private insurance covered 44.2% of total expenditures and 45.4% for

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the top 5% spenders, while Medicare covered 26.3% overall and 31.3% for the top 5%. Out-of-pocket (cash) payments accounted for 13.3% overall but only 7.3% for the top 5%, indicating that high spenders rely heavily on insurance. Medicaid covered 11.5% overall and 11.1% for the top 5%. Out-of-pocket payers are overrepresented in the bottom 50% (26.7%), suggesting cost-conscious behavior among those without insurance or high deductibles. According to the AHRQ (2020), patients paying out-of-pocket are the most cost-saving option based on the fact that they represent just 12.9% of the population, yet 25.7% of them are in the bottom 50% of expenditures with a .5 ratio. This could be based on the fact that those who pay out-of-pocket are more price sensitive or that those who are healthy are more likely to pay out-of-pocket. This is in sharp contrast to Medicare patients that represent 28.7% of the population, yet only 5.6% are in the bottom 50% with a 5 ratio, which is ten times greater than the out-of-pocket payers. This could also be due to the fact that older Medicare patients are more likely to spend more due to the increased cost of care for seniors accessing care.

Most commonly treated conditions among top 5%		
Condition	Overall	Top 5%
Hypertension	18.8%	44.0%
Mental disorders	16.4%	37.3%
Hyperlipidemia	14.0%	33.3%
Osteoarthritis	13.3%	37.8%
COPD, asthma, etc	11.3%	28.6%
Nervous system disorders	11.1%	38.1%
Injuries	8.7%	23.5%
Diabetes mellitus	8.0%	24.8%
Heart disease	6.4%	24.3%

According to the 2020 AHRQ Report, chronic conditions drive up healthcare expenditures. Among the top 5% spenders in 2019, 46.2% were treated for hypertension (vs. 18.6% overall), 44.5% for osteoarthritis (vs. 15.5% overall), and 36.3% for mental disorders (vs. 15.7% overall). Other prevalent conditions include nervous system disorders (38.7% vs. 11.9%) and heart disease (28.8% vs. 6.7%) (1). Non-chronically ill individuals are less likely to have these conditions, contributing to their lower spending.

III. SUMMARY

The findings indicate that employer-sponsored health insurance offers limited value for non-chronically ill employees aged 25–65. With 80% failing to meet their deductible, these individuals often pay out-of-pocket costs comparable to or higher than uninsured individuals who shop competitively (Anderson et al, 2025). For example, uninsured patients can access primary care for \$59 at CVS Minute Clinic, while insured individuals pre-deductible may pay \$100 or more (Anderson et al, 2025). The high concentration of expenditures among the top 5%—driven by older

individuals and those with chronic conditions—further highlights that healthy employees rarely benefit financially from insurance (AHRQ, 2020). While financial returns are limited for healthy employees, non-financial benefits such as peace of mind and preventive care access can add value. Non-financial benefits can be significant for a large percent of the population. For example, insurance provides peace of mind, protecting against catastrophic costs, such as hospital stays averaging \$151,839 for the top 1% (AHA, 2022). It also facilitates access to preventive services, which are often covered at no cost, promoting long-term health (AHA, 2022). For employers, offering insurance enhances employee satisfaction and retention, even if the financial return is low for healthy workers. The skewed expenditure distribution suggests that high-deductible plans may discourage utilization among low spenders, potentially leading to delayed care (McGough et al, 2024). Racial and ethnic disparities in spending may reflect access issues, with Hispanic and Black individuals more likely to delay care due to costs (McGough et al, 2024). This may also contribute to their underrepresentation in high-expenditure percentiles. Employers could address this by offering plans with lower deductibles or supplemental mental benefits like health savings accounts (HSAs) to reduce financial barriers.

IV. CONCLUSION

For non-chronically ill employees aged 25–65, employer-sponsored health insurance provides limited financial value due to high premiums and deductibles that mostly exceed typical healthcare expenditures. Approximately 80% do not meet their deductible, paying out-of-pocket costs similar to or higher than uninsured individuals for routine services (3). Only about 5% of the population spends over \$25,000 annually, typically those with chronic conditions or individuals from an older demographic. While financial benefits are minimal for healthy employees, insurance offers critical non-financial advantages, including risk protection and preventive care access. Risk protection for an individual not only protects against an accident but also transitioning from being non-chronically ill to chronically ill (diabetes, kidney failure, obesity etc.). Preventive care can potentially help mitigate the likelihood of moving from being healthy to chronically ill. Employers should consider plan designs that balance cost-sharing with accessibility to maximize value for themselves and their employees. Future research could examine the corporate financial benefits of requiring all employees to be covered with health insurance from the perspective that employees are the most valuable asset in a company and keeping them healthy and productive is in the best financial interests of the corporation. Future research could also examine how wellness programs (encouraging employees to exercise and complete preventive health screenings) affect the comparative value of health insurance from both the corporate and individual perspectives.

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REFERENCES

1. Agency for Healthcare Research and Quality (AHRQ), Medical Expenditure Panel Survey, Household Component, 2020, 2024
2. American Hospital Association, (2022) Importance of health coverage. www.aha.org/guidesreports/report-importance-health-coverage
3. Anderson SE, Pinder J, Dameff EM, Manassian A, Chuah KL (2025) A comparative expected value analysis study to determine if health insurance coverage for doctor visits, lab tests, imaging, prescription drugs, urgent care and emergency care visits in the United States provides financial benefit for the non-chronically ill insured that meet their deductible and the non-chronically ill insured that do not meet their deductible. *Account and Financial Management Journal*, 10(3), 3509–3513
4. CDC (2023) Ambulatory care use and physician office visits www.cdc.gov/nchs/fastats/physician-visits.htm
5. Census Bureau www.census.gov/content/dam/Census/library/publications/2022/demo/p60-278.pdf
6. Keisler-Starkey K., Bunch LN (2022) Health insurance coverage in the United States: 2021 U.S.
7. McGough M, Claxton G, Amin K, Cox C. How do health expenditures vary across the population? Peterson-KFF Health System Tracker, January 4, 2024
8. Mitchell EM (2019) Agency for Healthcare Research Quality, Concentration of health care expenditures and selected characteristics of persons with high expenses, US civilian non-institutionalized population, Statistical Brief #540
9. Ryan C. Most exchange enrollees will never reach deductible. American Action Forum, January 14, 2015. <https://www.americanactionforum.org/weekly-checkup/most-exchange-enrollees-will-never-reach-deductible/#ixzz8xdlzOwSv>
10. Yang J. (2023) Frequency US adults visited or consulted a primary care physician as of 2018, Statista, Nov. 23, www.statista.com/statistics/916781/primary-care-physician-visit-frequency-among-adults-us/