

Examining HSAs Through a DEI Lens

By Jake Spiegel, Employee Benefit Research Institute

AT A GLANCE

- Health savings accounts (HSAs) are a useful way for people enrolled in high-deductible health plans (HDHPs) to save and pay for medical expenses. While previous research has examined contribution, distribution, balance, and propensity to invest HSA balances, little is known about how usage varies by accountholder demographic. The Employee Benefit Research Institute (EBRI) has leveraged accountholder data from its HSA Database to examine the extent to which HSA contribution, distribution, and investment behavior differ based on the accountholder's race, ethnicity, gender, and income.
- In this *Issue Brief*, EBRI's analysis finds stark differences in HSA behavior based on accountholder race, ethnicity, gender, and income. For instance, accountholders living in disproportionately White or Asian ZIP codes contributed and withdrew more than their counterparts living in disproportionately Black or Hispanic ZIP codes. Similarly, male accountholders made larger contributions and had higher balances than female counterparts, as did higher-income accountholders relative to lower-income accountholders.
- Disparities in HSA account balances along racial, ethnic, gender, and income lines are not adequately explained by the length of HSA ownership. Instead, the disparities EBRI observes appear to be largely driven by contributions.
- There is ample evidence supporting the existence of health inequities among race, gender, and income lines. To the extent that accountholders take advantage of the benefits HSAs offer, HSAs may reduce health inequities. However, to the extent that HSAs are not well-utilized, they may serve to exacerbate health inequities.

Jake Spiegel is a Research Associate at the Employee Benefit Research Institute (EBRI). This *Issue Brief* was written with assistance from the Institute’s research and editorial staffs. Any views expressed in this report are those of the author and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

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Introduction

High-deductible health plans (HDHPs) have proliferated in recent years, as they have been increasingly adopted by employers seeking to rein in health care cost increases. Among private-sector employees with single coverage, 57.7 percent are enrolled in an HDHP (Fronstin and Spiegel 2021). Indeed, HSA-eligible HDHP offerings are increasingly common among employers, and HSA-eligible HDHPs are also available via Affordable Care Act (ACA) exchanges. Thus, utilizing an HSA has quickly become an important part of managing one's health for many Americans.

Health savings accounts (HSAs) offer valuable tax incentives to help accountholders enrolled in HSA-eligible health plans offset the higher deductibles those plans typically feature. Individuals can allocate pre-tax dollars to their HSAs. Individuals also have the ability to invest their HSA balances, and this growth is untaxed. Finally, funds may be withdrawn from HSAs on a tax-free basis for qualified medical expenses. And, as an important differentiator from flexible spending accounts (FSAs), another tax-advantaged account intended to help people defray medical and other qualified expenses, there is no "use-it-or-lose-it" provision in HSAs. Balances can build up year to year.

Recent analyses of HSA accountholder behavior have shown a strong link between age, as well as ownership tenure, and contribution and distribution behavior. Younger accountholders, perhaps because they tend to be healthier and earn less than their older counterparts, tend to contribute less to their HSAs and take smaller and less frequent distributions (Spiegel and Fronstin 2021). Similarly, a shorter tenure in an HSA was associated with smaller balances, lower contributions, and a lower propensity to invest in assets other than cash. There is likely significant interplay between these effects: younger accountholders, perhaps just starting their careers, also tended to have shorter tenures. However, there may also be a familiarity effect at play in HSA usage habits. The longer someone has had their HSA, the more they are familiar with how HSAs fit into their personal finances and maintaining their health, and the more likely they are to make larger contributions and make use of HSAs' tax advantages.

However, little is known about the specific intersection of race, gender, income, and HSAs. This is important because there is ample research detailing the myriad ways in which racial minorities, women, and low-income people experience worse health outcomes — also known as health inequities — which is documented in the next section. By enabling accountholders to pay for medical expenditures on a tax-free basis, and by helping accountholders save for health care expenses in retirement, there is a role for HSAs to play in blunting the effects of health inequities — but only if they are well-utilized. To the extent that HSAs are not used properly, there is a risk that they may actually reinforce health inequities. Developing an understanding of how HSAs are used can help policymakers work to address and rectify disparate outcomes. In this *Issue Brief*, we leverage the Employee Benefit Research Institute's (EBRI's) HSA Database to specifically examine the relationship between race, gender, income, and HSA utilization.

Background and Previous Research

The intersection of race, health, and personal finances is critically important in developing a better understanding of both public health as well as building systems that work toward greater health equity. This intersection also represents a fertile field of research.

Findings of racial- and ethnic-based health inequities are distressingly common in health care research. For instance, Black people in the United States have a lower life expectancy, even after accounting for some socioeconomic variables. Black and Hispanic people more commonly suffer from conditions such as obesity and diabetes (Braveman et al. 2010). American Indian, Black, and Hispanic people have also been found to suffer disproportionately relative to White people from a wide variety of ailments (Keppel 2007).

Income-based health inequities exist as well. A 2016 study examined the link between income and longevity and found that the difference in life expectancy between people in the richest 1 percent and poorest 1 percent was 14.6 years for men and 10.1 years for women, and that while the United States has seen an increase in life expectancy, much of that is driven by the increase enjoyed by higher-income Americans (Chetty et al. 2016). Lower-income people are also less likely to carry private health insurance, and medical resources, such as federally funded health centers, are not evenly distributed across communities, which negatively affects health (Andersen et al. 2002).

The degree of residential segregation in the United States has led to conditions in which access to educational and career opportunities is uneven. Evidence from a 2001 study examining the intersection of health and residential segregation suggests that segregation has a deleterious causal effect on health (Williams and Collins 2001). Furthermore, access to health care services is not evenly distributed. Low-income, Black, and Hispanic people, for instance, are more likely to lack health insurance than White and higher-income people, for instance (Artiga et al. 2021).

Discrepancies in health outcomes may be exacerbated by health care providers themselves. Indeed, there is evidence of unconscious bias against minority patients (Smedley et al. 2003). Evidence suggests that health care providers appear to exhibit implicit bias at a similar rate as the general population (Nosek and Riskind 2012). Implicit biases appear to have an effect on the courses of action health care providers take for their patients (FitzGerald and Hurst 2017). An experiment featuring actors portraying specific symptoms suggested that race and gender play a role in influencing physicians' recommendations: Physicians were much less likely to refer women and Black people for cardiac catheterization than men and White people (Schulman et al. 1999).

Unfortunately, however, the disparities along racial, ethnic, gender, and income lines observed in the United States' health care system do not end there. Indeed, these inequities have been observed within the specific context of HDHPs and HSAs as well. Recent research has examined the differential impact of race, ethnicity, gender, and income on the usage of services and health outcomes of enrollees in HDHPs. In particular, minority and low-income adults enrolled in HDHPs participated less frequently in HSAs than White and higher-income enrollees (Ellison et al. 2020). Given that HSAs can help people offset the higher deductibles featured in HDHPs, those who decline to enroll and contribute to an HSA may struggle to pay for health care expenses. Another study examining both HSAs and FSAs found that Black and Hispanic people utilized these tax-advantaged accounts at lower rates than White people (Ortiz et al. 2021). Furthermore, Ortiz et al. found that Black and Hispanic people without an HSA or FSA more frequently reported having problems paying medical bills and delaying care, potentially to the detriment of their health and further reinforcing health inequities.

However, none of the studies mentioned above explicitly examine a link between race and ethnicity, gender, and income, and HSA contribution, distribution, and investment behavior. Understanding how race and ethnicity, gender, and income intersect with HSAs is critical to developing strategies to better serve accountholders of all races, genders, and income levels. Furthermore, knowledge about discrepancies in HSA usage can help policymakers develop strategies to blunt health inequities.

Data and Methodology

EBRI's HSA Database is well-positioned to shed light on the intersection of HSAs, race, ethnicity, gender, and income.¹ The database contains detailed account-level information on over 11 million HSAs. The database contains accountholder-level data for HSA contribution, distributions, and investments, among others, as well as some basic demographic data, such as age, gender, and ZIP code.² While EBRI's HSA Database does not contain data on race or income, since it includes accountholder ZIP codes, we use those ZIP codes to proxy for race as well as income.

In particular, our analysis focuses on analyzing ZIP codes that are disproportionately White, Black, non-white Hispanic, or Asian. A ZIP code is defined as disproportionately White, Black, Hispanic, or Asian if, according to Census Bureau estimates, it contains a higher share of White, Black, Hispanic, or Asian residents than the United States as a whole. We conducted sensitivity analyses, and the findings are robust across a variety of specifications. Results from geocoded

analyses should be interpreted as the differences between neighborhoods with a disproportionately higher share of White, Black, Hispanic, or Asian residents, or as the differences between higher-income neighborhoods and lower-income neighborhoods. This analysis also examines ZIP-code-level household income. Due to the high degree of socioeconomic segregation in most American cities, ZIP codes tend to be reasonable proxies for income.

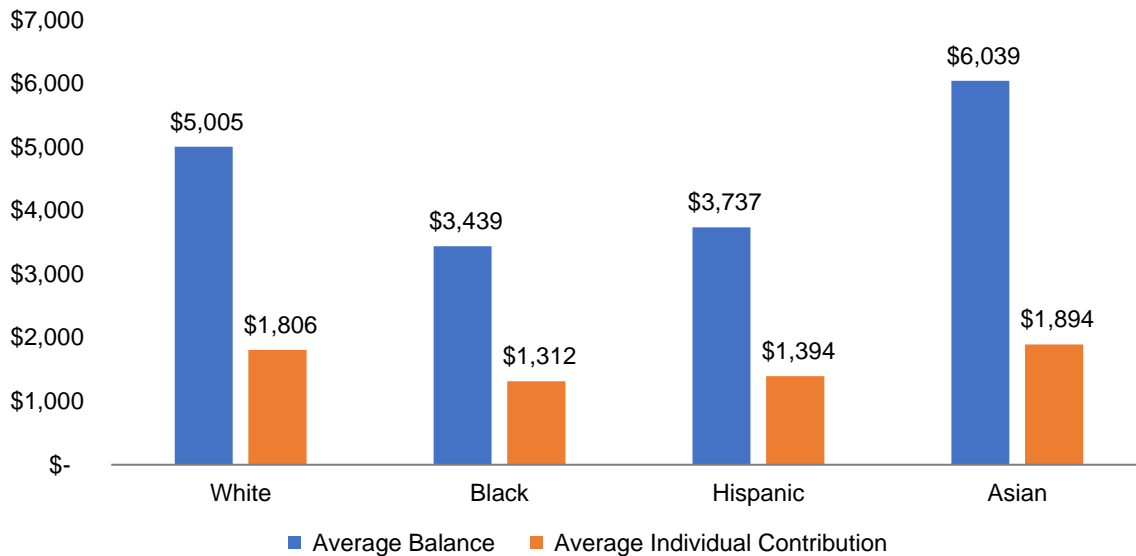
Findings

Race and Ethnicity

Our analysis finds that there do indeed exist discrepancies in HSA accountholder behavior and attributes between ZIP codes with disproportionate race and ethnicity compositions.

Accountholders living in disproportionately White ZIP codes had larger average HSA balances than accountholders living in disproportionately Black or Hispanic ZIP codes. Specifically, accountholders in disproportionately White ZIP codes had an average HSA balance of \$5,004, compared with an average HSA balance of \$3,438 and \$3,737 for accountholders living in disproportionately Black and Hispanic ZIP codes, respectively, shown below in Figure 1. Accountholders living in disproportionately Asian ZIP codes had the highest average balance, at \$6,039.

Figure 1
Average HSA Balance and Average Individual HSA Contribution, by ZIP Code Racial Composition



Note: A ZIP Code is classified as "White," "Black," "Hispanic," or "Asian" if it contains a higher share of residents identifying as such than the United States as a whole.
HSA = health savings account.

Importantly, these results do not appear to be driven by differences in account tenure. We do not find evidence of accountholders in White ZIP codes having owned their HSAs for a longer period of time, which would enable them to build up higher balances, for instance. Average HSA ownership tenure ranged from 3.1 years in disproportionately Black ZIP codes to 3.3 years in disproportionately White ZIP codes. A difference of several months of account ownership does not satisfactorily explain the discrepancy in average HSA balances.

The differences observed in average balances for accountholders living in disproportionately White and disproportionately Black or Hispanic ZIP codes may instead be driven by contribution behavior. Our analysis indicates that accountholders living in disproportionately White ZIP codes made larger contributions on average than their counterparts living in disproportionately Black or Hispanic ZIP codes. Accountholders living in disproportionately White

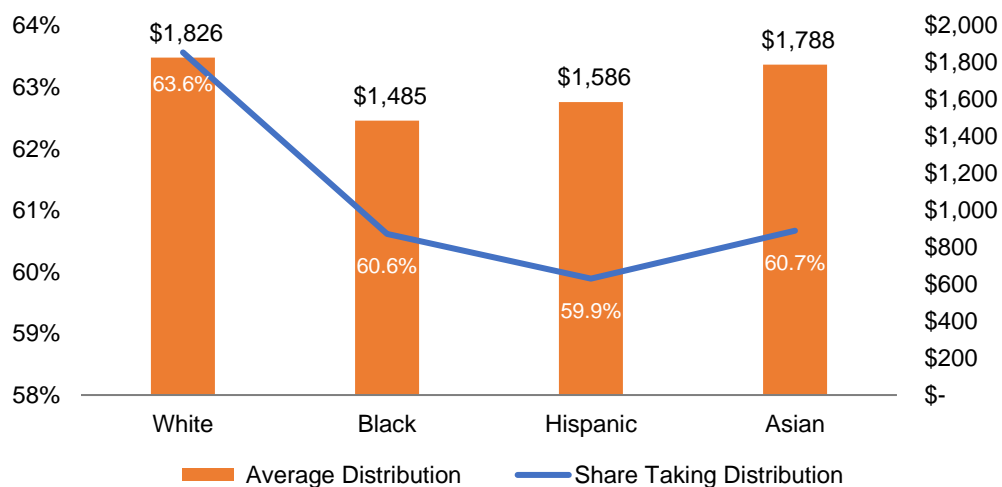
ZIP codes contributed \$1,806 to their HSA on average, compared with \$1,312 and \$1,394 for disproportionately Black and Hispanic ZIP codes, respectively, as shown above in Figure 1. As with average account balances, accountholders living in disproportionately Asian ZIP codes had the highest average employee HSA contribution at \$1,894.

While the differences in contribution levels made by accountholders in disproportionately White or Black ZIP codes may seem small at first blush, they can add up over the years. The \$494 difference between accountholders living in relatively Whiter and relatively Blacker ZIP codes grows to nearly \$1,500 after three years — the median ownership tenure for both accountholders living in disproportionately White ZIP codes and those living in disproportionately Black ZIP codes — which accounts for much of the gap in average HSA balances between these two ZIP code compositions.

In addition to contributing more than accountholders living in disproportionately Black and Hispanic ZIP codes, those living in disproportionately White ZIP codes enjoyed larger contributions from their employers and were more likely to receive an employer contribution as well. Forty-four percent of HSA accountholders living in a disproportionately White ZIP code received an employer contribution, and the average contribution was \$897. A slightly smaller share of accountholders in disproportionately Black ZIP codes — 41 percent — received an average employer contribution of \$794, and 42 percent of accountholders in disproportionately Hispanic ZIP codes received an average contribution by their employer to their HSA of \$838. Finally, 43 percent of accountholders in disproportionately Asian ZIP codes received an average employer contribution of \$908. While these contributions add up and meaningfully impact account balances over time, it should be noted that employer contributions are likely not significant drivers of the discrepancies in average account balances.

Also, higher balances for accountholders living in disproportionately White or Asian ZIP codes do not appear to be driven by these accountholders treating their HSAs as savings vehicles and refraining from taking frequent and large distributions. In fact, accountholders in disproportionately White or Asian ZIP codes took distributions slightly more frequently than accountholders in disproportionately Black or Hispanic ZIP codes, and their average distributions were higher as well, as shown below in Figure 2. Previous research has suggested that larger distributions are associated with larger HSA balances; accountholders who have not built up large balances may feel less comfortable taking a distribution, and vice versa (Spiegel and Fronstin 2021).

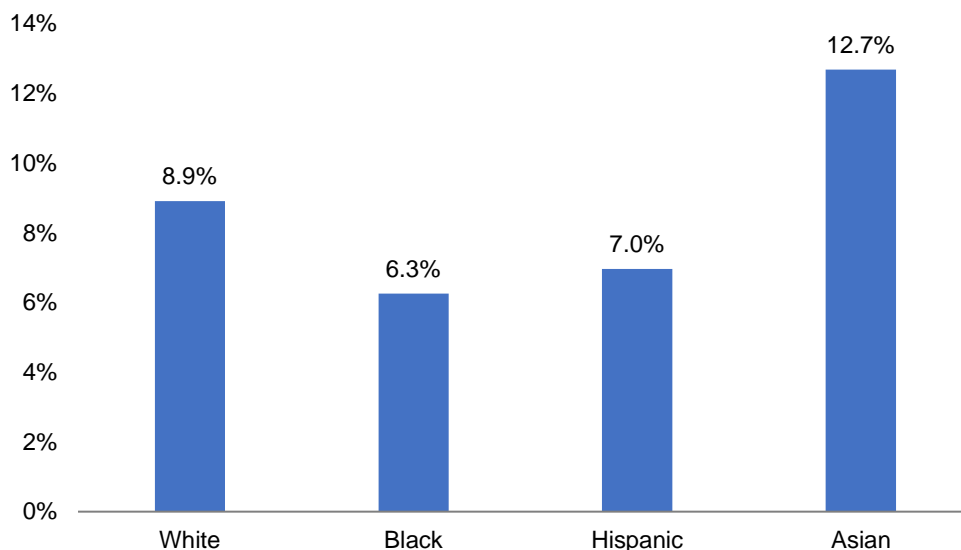
Figure 2
Share of HSA Accountholders Taking a Distribution, and Average Size of Distribution, by ZIP Code Racial Composition



Note: A ZIP Code is classified as "White," "Black," "Hispanic," or "Asian" if it contains a higher share of residents identifying as such than the United States as a whole.
HSA = health savings account.

Finally, we observe that disproportionately White or Asian ZIP codes are more likely to take advantage of the ability to invest HSA balances. Only 6.3 percent of accountholders in disproportionately Black ZIP codes and 7 percent of those in disproportionately Hispanic ZIP codes were HSA investors, shown below in Figure 3. This compares with 8.9 percent of White and 12.7 percent of Asian HSA accountholders investing their balances. This may be a manifestation of accountholders living in these ZIP codes having lower balances on average than their counterparts in disproportionately White or Asian ZIP codes. Indeed, previous research has suggested that building up a sufficiently large balance may influence the decision to invest HSA balances. However, even controlling for balances, our analysis finds that accountholders in disproportionately Black or Hispanic ZIP codes invest less frequently than their counterparts in White or Asian ZIP codes.

Figure 3
Share of HSA Accountholders Who Invest,
by ZIP Code Racial Composition



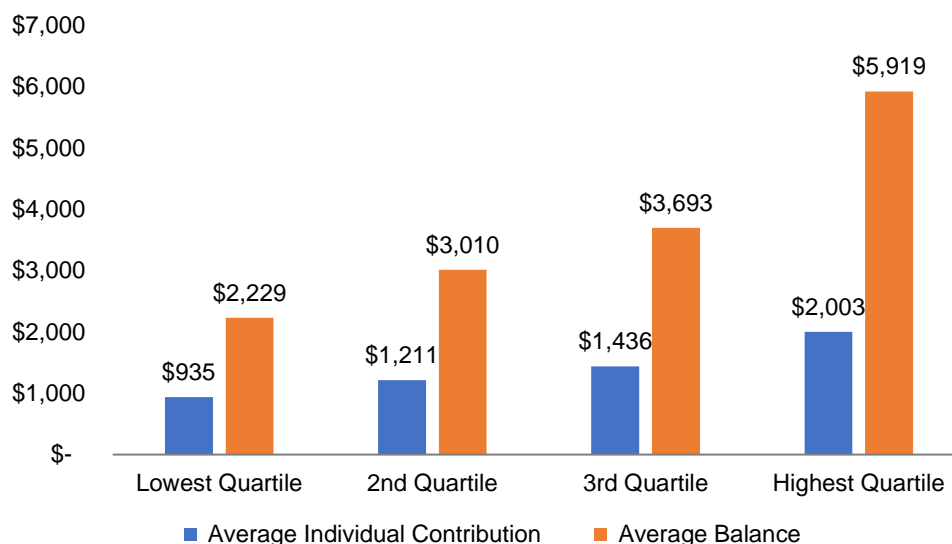
Note: A ZIP Code is classified as "White," "Black," "Hispanic," or "Asian" if it contains a higher share of residents identifying as such than the United States as a whole.
HSA = health savings account.

Income

Our next analysis relies on geocoded median household income ZIP code data. We sorted all ZIP codes in the United States by income and assigned accountholders into income quartiles based on their ZIP code's median household income. Most accountholders in EBRI's HSA Database live in ZIP codes in the highest income quartile. This is not entirely surprising, given that people who are uninsured or receive coverage through Medicaid have, on average, a lower household income — and would be unrepresented in EBRI's HSA Database, since they are not enrolled in HDHPs — than those who receive health insurance coverage through their employer or the individual market. Of the accountholders in EBRI's HSA Database, 52 percent lived in ZIP codes where the median household income was greater than \$71,244. Twenty-two percent of accountholders lived in a ZIP code where the median household income was between \$71,243 and \$55,682, and an additional 16 percent lived in a ZIP code where the median household income was between \$44,644 and \$55,681. Only 9 percent lived in ZIP codes in the bottom quartile of household income (less than \$44,644).

As might be expected, average HSA balances increased alongside income quartiles. Accountholders living in ZIP codes in the lowest income quartile had an average balance of \$2,229, compared with \$3,009, \$3,693, and \$5,919 for those living in the 2nd, 3rd, and highest quartiles, respectively, shown below in Figure 4. Despite HDHPs often featuring lower premiums than traditional health care plans, lower-income accountholders may have cash flow or budgetary issues that make it difficult to contribute as much to their HSAs as their higher-income counterparts.

Figure 4
Average HSA Balance and Average Individual Contribution, by ZIP Code Income Quartile



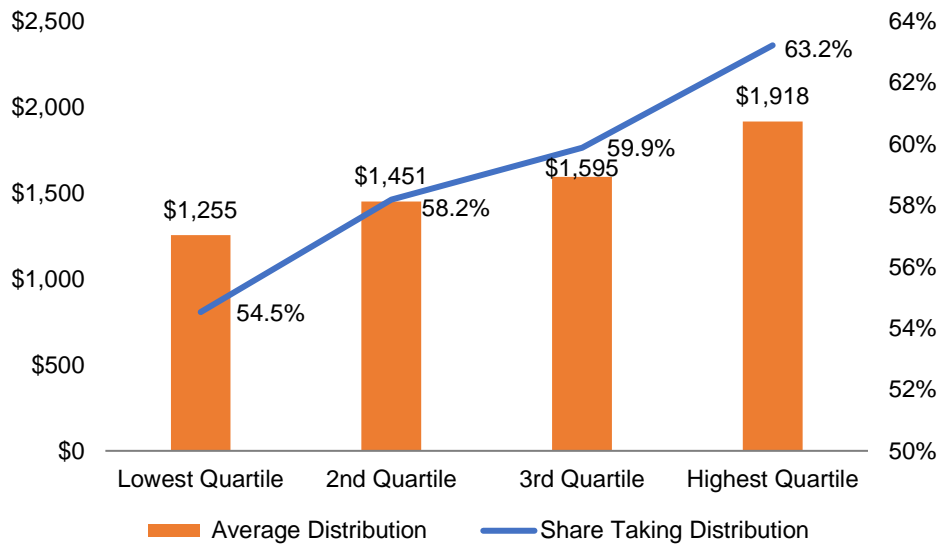
Note: HSA = health savings account.

Similar to balances, average individual contributions increased alongside income quartiles. Accountholders living in lower-income ZIP codes contributed only \$935 to their HSAs on average, shown above in Figure 4. Those living in higher-income ZIP codes, meanwhile, contributed more than twice that amount, socking away \$2,003 on average in their HSAs. Accountholders living in ZIP codes in the 2nd and 3rd quartiles contributed \$1,211 and \$1,436, respectively. It is not particularly surprising that residents of higher-income ZIP codes contribute more to their HSAs; those living in higher-income ZIP codes are more likely to be higher-income themselves, after all. And since higher-income accountholders likely have a healthier cash flow than their lower-income counterparts, they are able to sock away more on average.

These discrepancies are likely to add up over time, positioning accountholders in higher-income ZIP codes to shoulder large medical expenses more easily than their lower-income peers. This has ramifications for retirement security: A couple facing particularly high drug costs will need more than \$361,000 to have a high probability of having enough money to cover their health care needs in retirement (Fronstin and VanDerhei 2022). Despite HDHPs often featuring lower premiums than traditional health care plans, lower-income accountholders may have cash flow or budgetary issues that make it difficult to contribute as much to their HSAs as their higher-income counterparts.

The propensity to take a distribution also increased alongside ZIP income quartiles. Accountholders living in ZIP codes in the highest income quartile more frequently took distributions than those living in ZIP codes in the lowest income quartile: 63 percent compared to 55 percent. Residents of the 2nd and 3rd income quartiles fell in the middle of the two extremes, with 58 percent and 59 percent taking a distribution, respectively. In addition to more frequently taking distributions, the average distribution increased alongside income quartiles as well. Those living in the lowest-income ZIP codes took an average distribution of \$1,255, increasing to \$1,451 for those living in the 2nd quartile, \$1,595 for those living in the 3rd quartile, and \$1,918 for those living in the highest income quartile.

Figure 5
Share of HSA Accountholders Taking a Distribution and
Average Size of Distribution, by ZIP Code Income Quartile

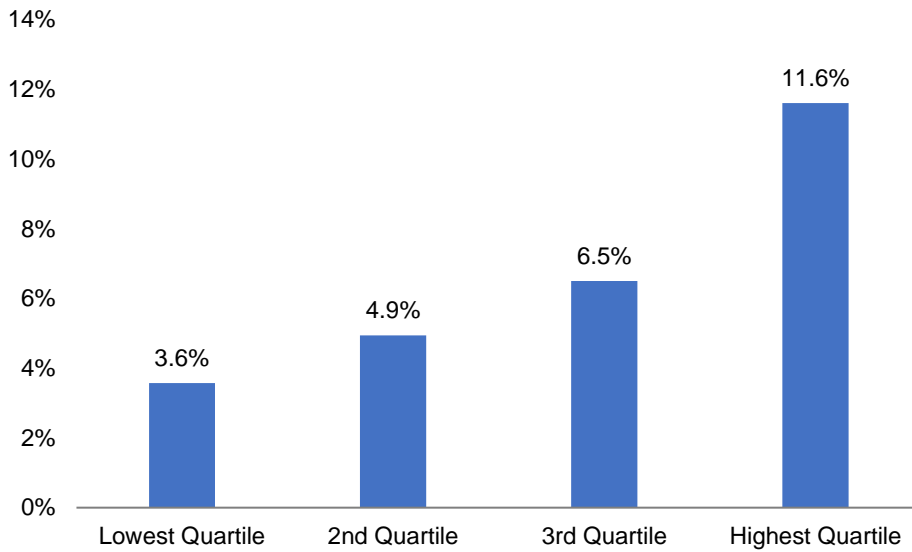


Note: HSA = health savings account.

We once again observe a pattern of accountholders with larger account balances taking larger distributions on average. Some of this can be attributed to the fact that accountholders with small balances cannot take large distributions: HSA accountholders cannot withdraw more than their balance. However, we observe that the propensity to take distributions also increases alongside balances. That this pattern transcends both race and income suggests a key link between balances and distributions.

The propensity to invest also increased alongside ZIP code income quartiles. Relatively few accountholders living in ZIP codes in the lowest income quartile invested any portion of their balances in assets other than cash — only 3.7 percent took advantage of that option. This may be a reflection of a hesitancy to invest dollars earmarked for health care expenditures; proportionally, accountholders in lower-income ZIP codes took larger distributions in relation to their total balances than accountholders in higher-income ZIP codes. Accountholders living in the highest-income-quartile ZIP codes, meanwhile, invested at least some portion of their balances in assets other than cash much more frequently, with 12 percent qualifying as investors. These accountholders not only had higher average balances, but by virtue of them being higher income, they may be better positioned to weather an unexpected medical expense without needing to tap into an HSA to cover it.

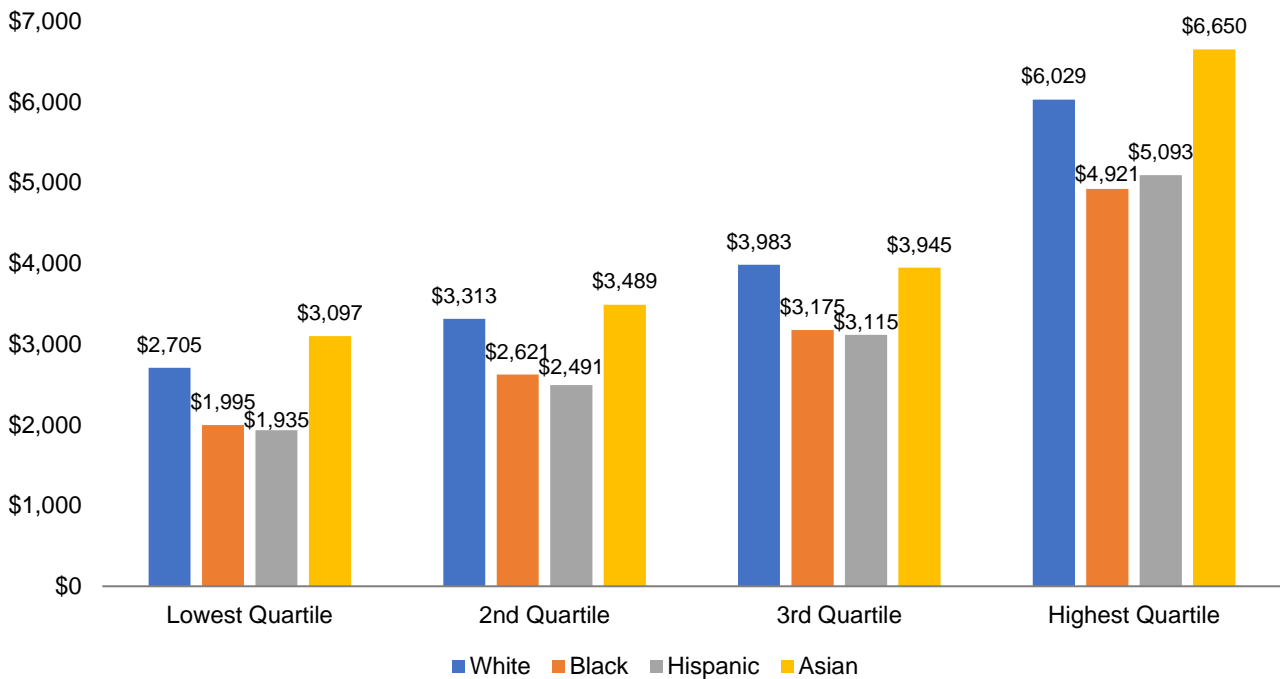
Figure 6
Share of HSA Accountholders Who Invest, by ZIP Code Income Quartile



Note: HSA = health savings account.

Additionally, when disaggregating results by both race/ethnicity makeup and income, these results remain stable. Even residents in disproportionately Black ZIP codes in the highest income quartile had lower average individual contributions than their counterparts in disproportionately White ZIP codes in the highest income quartile. In fact, accountholders in disproportionately White ZIP codes in the lowest income quartile had higher contributions than accountholders living in both disproportionately Black and Hispanic ZIP codes in the 2nd income quartile, shown below in Figure 7.

Figure 7
Average Individual Contribution to HSA, by ZIP Code
Racial Composition and Income Quartile



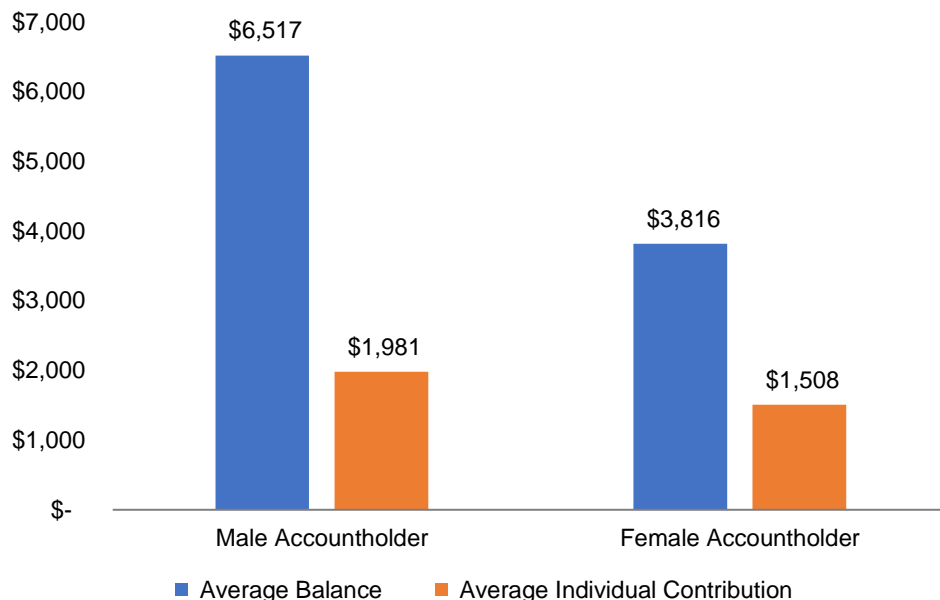
Note: HSA = health savings account.

Gender

As with race and income, our analysis reveals stark differences in HSA saving and spending behavior between male and female accountholders. Of the accountholders in EBRI's HSA Database with a gender indicator, 57 percent are male and 43 percent are female. It is possible that the accountholders in EBRI's HSA Database skew more heavily male than the universe of all HSA owners. Kullgren et al. (2020) find, for instance, that half of adults in HDHPs were female. However, Kullgren et al. do not specifically examine enrollment in HSAs, and their findings suggest that HSA enrollment does not necessarily track HDHP enrollment. Kullgren et al. found that lower-income people enrolled in HSAs less frequently than those with higher incomes, for example, as did those with less education and lower self-reported health statuses. There is, unfortunately, little work that examines the intersection of HSAs and gender specifically.

Male HSA accountholders had larger balances on average than their female counterparts. Male accountholders accrued a balance of \$6,517 on average, compared with only \$1,981 for women, shown below in Figure 8. This gap is significant and, as was the case with the discrepancies observed by race and by income, cannot be explained solely by account ownership tenure; the median tenure for both men and women alike was three years, and mean ownership tenure was 3.4 years for men and 3.2 years for women.

Figure 8
Average HSA Balances and Individual Contributions, by Gender



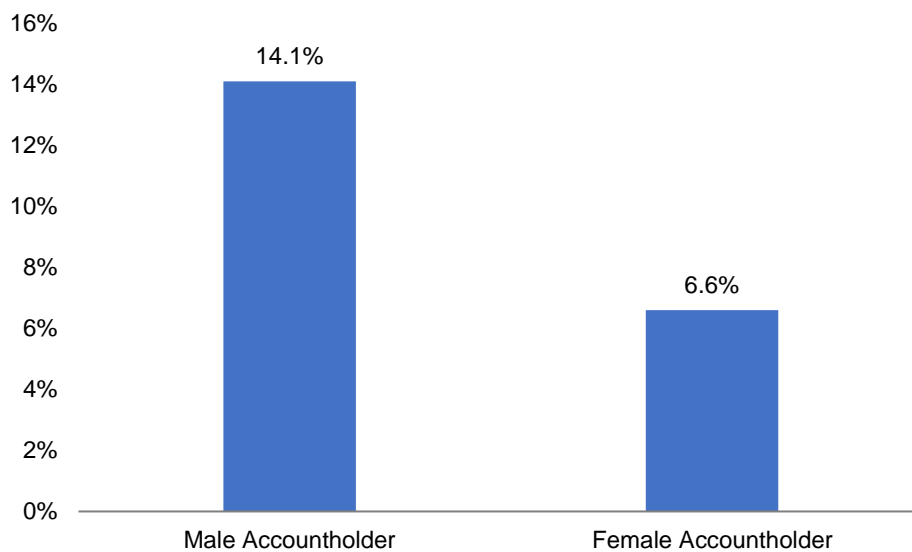
Note: HSA = health savings account.

Male HSA accountholders contributed more on average than female accountholders, with male accountholders contributing \$1,980 compared to female accountholders' \$1,508, shown above in Figure 8. Part of this discrepancy may be explained by a gender-based pay gap. With lower salaries, women may find it relatively more difficult to divert savings to their HSAs. Also, this may be a reflection of families more commonly receiving health insurance coverage through a male worker than a female worker; 23 percent of women are covered as a dependent, compared with 16 percent of men (Kaiser Family Foundation 2021). Accountholders with family coverage would likely save more money in their HSAs out of necessity. Having to save and pay for an entire family's medical expenses would likely skew average contributions, particularly since the HSA contribution limit for accountholders enrolled in family coverage is twice that of those enrolled in self-only coverage.

Two factors may account for much of the discrepancy in average HSA balances by gender. First, men contributed an average of \$473 more per year than women did. Extrapolated over three years — the median accountholder tenure — this accounts for \$1,419 of the \$2,701 difference in average balances. Second, men invested at least some portion of

their HSA balances much more frequently than women did; 14.1 percent of men held investments in their HSAs, compared with only 6.6 percent of women, shown below in Figure 9. Of course, if an accountholder earmarks HSA funds for medical expenses they expect to incur, they would be best served by not subjecting those funds to market risks, and the discrepancy in the propensity to invest may very well be a manifestation of that. However, the ability to invest funds allocated to HSAs allows for balances to grow faster than through contributions alone.

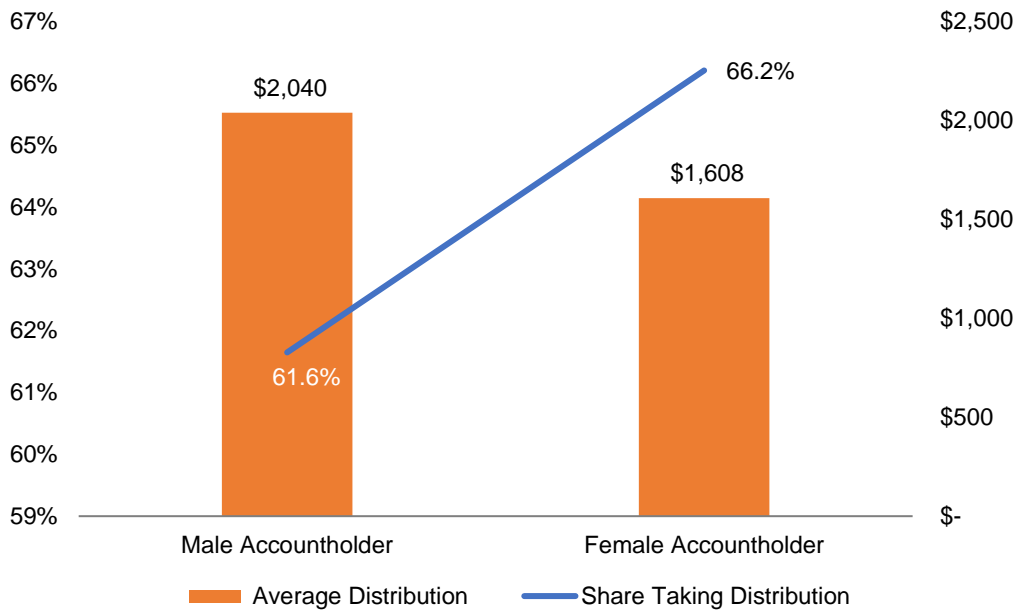
Figure 9
Share of HSA Accountholders Who Invest, by Gender



Note: HSA = health savings account.

Bucking the trend observed in both the race and income analyses, a higher share of female accountholders took distributions, but male accountholders took larger distributions on average. Sixty-six percent of female accountholders took a distribution, compared with 62 percent of male accountholders, shown below in Figure 10. It is thoroughly well-documented that women tend to incur more medical expenses than men; despite comprising about 50.8 percent of the population in the United States, women account for about 56 percent of total health care spending (Centers for Medicare and Medicaid Services 2014). Thus, the finding that women took distributions from their HSAs more frequently than men is not entirely surprising. However, that women took smaller distributions *is* somewhat surprising. This may be another artifact of male accountholders more frequently being the source of health insurance coverage for their entire family; a family is more likely to incur higher medical expenditures than a single person. However, this may also indicate cash flow problems on the part of women, in which female accountholders need to tap their HSAs more frequently to defray medical expenses in a way that male accountholders may not. Bolstering this hypothesis is the aforementioned evidence that female accountholders invested their HSAs much less frequently than male accountholders — 6.6 percent compared with 14.1 percent.

Figure 10
**Share of HSA Accountholders Who Took a Distribution,
 and Average Size of Distribution, by Gender**



Note: HSA = health savings account.

Conclusion

While there is extant literature examining race, gender, and the propensity to enroll in HDHPs and HSAs, there has been little empirical work focusing on the intersection of HSA usage and race, gender, and income. Ample evidence supports the existence of health inequities among race, gender, and income lines. To the extent that accountholders use HSAs optimally, they may reduce health inequities. However, to the extent that accountholders do not take advantage of the benefits of HSAs, they may serve to exacerbate health inequities.

Average account tenure was similar across ZIP codes, and while accountholders in disproportionately White or Asian ZIP codes did receive larger and more frequent employer contributions, these differences were quite small, as were the differences in rates of investment. And accountholders in disproportionately White and Asian ZIP codes took larger and more frequent distributions than accountholders living in disproportionately Black and Hispanic ZIP codes, which is counterproductive to building up larger balances. And contributions appear to drive much of the differences we observe in average HSA balances based on the racial and ethnic composition of neighborhoods.

We observe strikingly similar patterns in contribution, distribution, and investment behavior across race, gender, and income. Accountholders living in disproportionately Black or Hispanic ZIP codes, those living in lower-income ZIP codes, and female accountholders all tended to have smaller balances and contributed less to their HSAs. Smaller balances and smaller contributions may leave these accountholders less prepared to weather a large, unexpected medical expense. Across race, ethnicity, and income levels, higher account balances were associated with a greater propensity to take distributions, and larger distributions on average. One notable exception to this pattern is that a higher share of women accountholders took distributions than male accountholders.

Racially based, ethnicity-based, and income-based discrepancies in the usage of HSAs are troublesome. Indeed, suboptimal HSA usage may exacerbate widely documented extant health inequities. To the extent that those enrolled HDHPs do not also enroll in HSAs, do not take full advantage of the tax benefits HSAs offer, or do not save a sufficient amount, they may find it more difficult to pay for medical expenses, and may delay necessary care or forgo it altogether. Delaying or forgoing care has deleterious effects on health. We do see evidence of those living in

disproportionately Black or Hispanic ZIP codes contributing less on average than their peers living in disproportionately White or Asian ZIP codes. Accountholders living in disproportionately Black and Hispanic ZIP codes were also much less likely to invest their HSA balances, unable or unwilling to avail themselves an important wealth-building strategy that HSAs uniquely offer, which may work to exacerbate existing inequities and may leave them less prepared to handle medical costs in retirement.

References

- Andersen, Ronald M., Hongjian Yu, Roberta Wynn, Pamela L. Davidson, E. Richard Brown, and Stephanie Teleki. "Access to Medical Care for Low-Income Persons: How Do Communities Make a Difference?" *Medical Care Research and Review*, December 2002.
- Artiga, Samantha, Latoya Hill, Kendal Orgera, and Anthony Damico. "Health Coverage by Race and Ethnicity, 2010-2019." *Kaiser Family Foundation*, 2020.
- Braveman, Paula A., Catherine Cubbin, Susan Egeter, David R Williams, and Elsie Pamuk. "Socioeconomic Disparities in Health in the United States: What the Patterns Tell Us" *American Journal of Public Health*, April 2010.
- Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group. "Total Personal Health Care Spending by Gender and Age Group, Calendar Years 2002, 2004, 2006, 2008, 2010, 2012, and 2014." 2017.
- Chetty, Raj, Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron, and David Cutler. "The Association Between Income and Life Expectancy in the United States, 2001-2014." *Journal of the American Medical Association*, April 26, 2016.
- Ellison, Jacqueline, Paul Shafer, and Megan B Cole. "Racial/Ethnic and Income-Based Disparities in Health Savings Account Participation Among Privately Insured Adults." *Health Affairs*, vol. 39 no. 11, November 2, 2020.
- Fitzgerald, Chloë, and Samia Hurst. "Implicit Bias in Healthcare Professionals: a Systematic Review" *BMC Medical Ethics*, 18, 19. 2017.
- Fronstin, Paul, and Jake Spiegel, "Trends in Health Savings Account Balances, Contributions, Distributions, and Investments and the Impact of COVID-19," *EBRI Issue Brief*, no. 538 (Employee Benefit Research Institute, September 15, 2021).
- Fronstin, Paul, and Jack VanDerhei, "Projected Savings Medicare Beneficiaries Need for Health Expenses Spike in 2021," *EBRI Issue Brief*, no. 549 (Employee Benefit Research Institute, January 13, 2022).
- Kaiser Family Foundation. Women's Health Insurance Coverage. November 8, 2021.
- Kullgren, Jeffrey T., Elizabeth Q. Cliff, Christopher Krenz, Brady T. West, Helen Levy, Mark Fendrick, and Angela Fagerlin. "Use of Health Savings Accounts Among US Adults Enrolled in High-Deductible Health Plans." *JAMA Network Open*, July 17, 2020.
- Nosek, Brian A., and Rachel G Riskind. "Policy Implications of Implicit Social Cognition." *Social Issues and Policy Review*, March 2012.
- Ortiz, Selena E., Joel E. Segel, and Linh M. Tran. "Health Savings Plans and Disparities in Access to Care by Race and Ethnicity." *American Journal of Preventive Medicine*, 2021.
- Schulman, Kevin A., Jesse A. Berlin, William Harless, Jon F. Kerner, Shyrl Sistrunk, Bernard J. Gersh, Ross Dubé, Christopher K. Taleghani, Jennifer E. Burke, Sankey Williams, John M. Eisenberg, William Ayers, and José J.

Escarce. "The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization." *New England Journal of Medicine*, February 25 1999.

Smedley, Brian D., Adrienne Y. Stith, and Alan R. Nelson. "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care." *Institute of Medicine*, 2003.

Spiegel, Jake, and Paul Fronstin, "Health Savings Account Balances, Contributions, Distributions, and Other Vital Statistics: Evidence from the EBRI HSA Database," *EBRI Issue Brief*, no. 543 (Employee Benefit Research Institute, October 14, 2021).

Williams, David R., and Chiquita Collins. "Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health." *Public Health Reports*, September-October 2001.

Endnotes

¹ EBRI maintains other databases. Prior research has used elements from multiple databases. However, at no time is personally identifiable information shared between the databases.

² About half of the accountholders in EBRI's HSA Database have gender data reported.

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