

MAXIMIZING THE VALUE OF CONSUMER-DRIVEN HEALTH PLANS

A closer look at HRA and HSA

EXECUTIVE SUMMARY

Cigna has provided an annual analysis on Consumer-driven Health Plans (CDHPs) and associated medical claims for the last eight studies. CDHPs have generally been found to be more effective than traditional plans in terms of reducing total medical cost, especially in the short term. However, few have studied differences in the customer experience attributable to plan type (Health Reimbursement Accounts (HRA) and Health Savings Accounts (HSA)) within the CDHP universe of offerings or been able to link the medical experience to customers' HSAs. So, Cigna studied information on demographics, income levels, medical claims, account information and account spending. The following findings help dispel some misconceptions about CDHPs.



Total Medical Cost (TMC) correlates more with plan design than plan type (HRA vs. HSA)



Lower-income populations in a CDHP don't avoid care



Contributions to an HSA correlate more strongly than household income to better health management



People learn about their new CDHP at varying speeds and Cigna has developed a predictive model to identify and proactively support customers' transitions

Together, all the way.®



SECTION 1

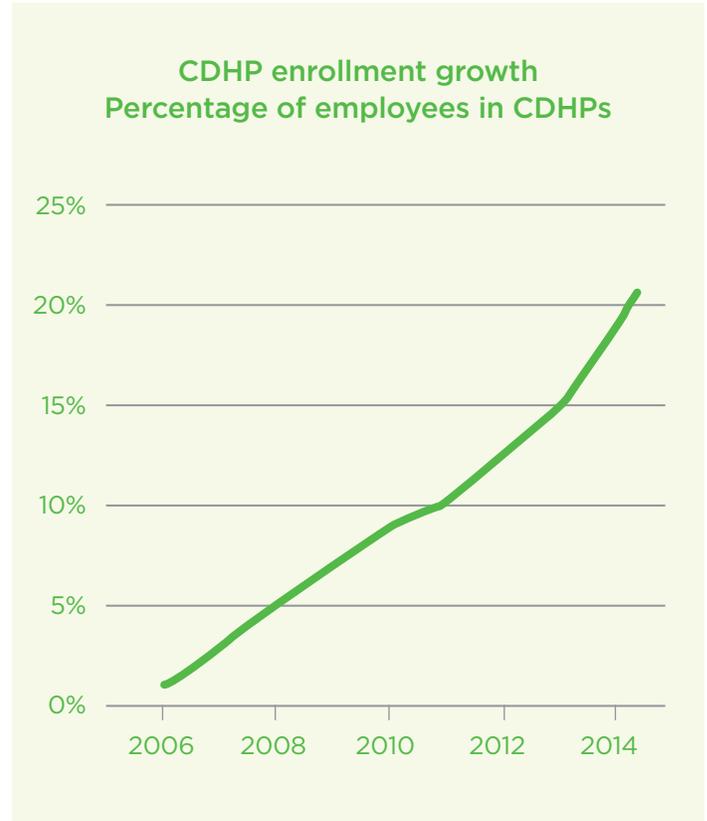
BACKGROUND

Consumer-driven Health Plans (CDHPs) were created to help combat rising health care costs, as well as to provide consumers with increased transparency and control over their health care expenditures. Although considerable research has been conducted on CDHPs, significant gaps remain in our understanding of them. Cigna has gained extensive knowledge from studying more than 50 employers over a five-year period. This paper outlines some novel insights into what works with CDHPs and how to make them more effective.

A BRIEF HISTORY OF CDHPS

The concept of a medical savings account (MSA) first surfaced in the late 1980s as a solution for “over-insurance.” Health care analysts believed there was a correlation between over-insurance and the rising cost of health care, and that if customers were more engaged in paying for their health care, that those costs would decrease. CDHPs were first launched in the late 1990s by health venture capitalists.¹ Legislative reforms led to the release of Health Reimbursement Accounts (HRAs) and Health Savings Accounts (HSAs) in 2001 and 2003, respectively.² These plans each combine a high annual deductible with tax-advantaged personal accounts and lowered monthly premiums. Early reception to these plans was mixed. Some proponents felt they could cap much of the excessive spend. Others felt customers weren’t sufficiently sophisticated or disciplined enough to properly manage their health care and health care spending, and that really, this was an employer tactic to shift costs over to the inexperienced customer. More recently their popularity has grown, with the number of employees enrolled in CDHPs growing from 3% in 2006 to 23% in 2014,³ as they’ve proven to be an effective tool to help drive engagement and reduce costs.

We began offering our Cigna Choice Fund® HRA and HSA to employer clients in 2004. These solutions combine Cigna’s underlying medical plan with either an HRA fund or an HSA, delivering an integrated experience. Choice Fund has enjoyed robust adoption amongst our employer clients since inception. With over three million CDHP customers as of December 2014, we now have approximately one in four of our U.S. group medical customers enrolled in one of these plans. Among our CDHP consumers, 61% are enrolled in our Choice Fund HRA plans and 39% are enrolled in our Choice Fund HSA solution as of December 2014.⁴



RESULTS TO DATE ON CDHP

Better health risk profiles compared with traditional Cigna plans

- › 10% health risk score improvement in the first year of moving to a Cigna CDHP offering; remained 6% better in their second year.⁵
- › Repeated the analysis using 2011 data and again, saw improvement (6%) in their health risk score the first year.⁶

Immediate cost savings with switch to CDHP

- › Early third-party studies found a short-term cost savings for the CDHP design – 21% in the first year.⁷
- › Since 2006, Cigna has consistently seen double-digit total medical cost savings for our CDHP customers, even with cost-share neutral plan design.⁶
- › Several factors account for the level of total medical cost savings that the employer is able to realize in the first year.
 - The current plan offering versus proposed plan offering
 - Amount of employer funding
 - Communications strategy

After immediate savings, mixed results around long-term CDHP savings

- › Incremental savings in later years are more modest in some employer segments.⁶
- › The ongoing trend can be similar to that of a traditional medical plan, but given the significant first year trend savings, the total medical costs remain lower than if the group had remained in a traditional PPO or HMO type plan.

HRA vs. HSA savings

- › RAND Corporation found that cost savings increase with higher deductibles.⁸
- › Enrollees in HSAs (with their higher IRS-required deductible limit) have a greater decrease in costs than those in HRAs, especially for outpatient services and prescription drug use. However, current studies haven't factored in plan design and other variables that may have an effect.^{8,9}

Concerns of effect on vulnerable populations may be unwarranted

There is little evidence to support concerns of adverse effects of enrollment in CDHPs on more vulnerable populations, such as those with fewer financial assets. CDHP benefit designs affect lower-income populations and the chronically ill to the same extent as non-vulnerable populations.⁹

10% better health risk profiles

Double-digit total medical cost savings

CDHPs can deliver immediate savings

CDHPs show no negative effect on lower income or chronically ill

SECTION 2

DIGGING DEEPER TO LEARN MORE



Cigna Choice Fund HRA
Integrated Cigna medical
and HRA administration



Cigna Choice Fund HSA
Integrated Cigna medical
and HSA administration



Non-integrated HSA
Cigna medical plan
administration only



Profiles of customers in the study population

What are the differences in the customer profiles of Cigna customers enrolled in the integrated Choice Fund HRA, integrated Choice Fund HSA and non-integrated HSA plans (where Cigna only administers the underlying qualified medical plan)?

To better understand any differences in customer profiles associated with the type of plan they're enrolled in, we followed a group of over 50 employers (35 HRAs, 14 integrated Choice Fund HSAs and 13 non-Integrated HSAs) as they transitioned from traditional plans to full-replacement CDHPs in 2011.¹⁰ Only the HRA or HSA was offered to each employee population.

- › HSA enrollees have fewer ER and more preventive visits, and slightly lower health risk than HRA participants.
- › Integrated Choice Fund HSA deductible levels are significantly higher on average than HRA deductibles, but because employer contributions also are larger, cost-share (the portion of the deductible the employee must cover) is similar across plan types.

While some differences do exist, the characteristics of those enrolled in HSAs and HRAs in this population seem to be fairly similar.

ONE-YEAR COMPARISONS: HRA AND HSA

We compared the one-year impact of plan type on cost trends and employee engagement among these three plan types.^{11,12}

- › Integrated Choice Fund HRA
- › Integrated Choice Fund HSA
- › Non-integrated HSA



Plan type cost trends

Are there differences in medical cost trends between HRA and HSA plans, after adjusting for health risk, utilization, demographic characteristics and community wealth?

In the first year, there were no statistically significant differences between HRA and the integrated Choice Fund HSA (we were unable to study the non-integrated HSA due to limited employer contribution data).

Plan design has greater effect than plan type on TMC

While there is much discussion around which plan type yields lower total medical cost – HRA or HSA – we have actually observed a stronger correlation to the plan design (deductible, OOP, etc.) level than plan type. Across our book of business, in other work, we've also seen that even when employee cost-share is kept neutral, an increase in the plan's deductible results in a lower TMC.¹³ Therefore, savings can be achieved using a cost-share neutral approach by simultaneously raising deductible level and employer contributions.



Customer engagement

Does customer engagement provide deeper insight into cost trends?

Choice Fund HSA customers exhibit more favorable consumerism shopping behavior compared with HRA.

- › 4.9 times more likely to use care at a Center of Excellence (COE) than other locations, even when comparing people in the same zip code.
- › While not statistically significant, medical costs were directionally lower per customer per year, driven by plan design rather than plan type (HRA vs. HSA).

Furthermore, we observed a 12% higher monthly utilization of myCigna.com from Choice Fund HSA customers compared with non-integrated HSA customers, suggesting they are exhibiting favorable consumerism behavior.

Factors: Income and contributions

Because of pervasive concerns around whether greater financial burdens harm lower wealth consumers in CDHPs, we revisited this issue. We combined medical data with actual HSA bank account information, in addition to the typical proxy for wealth of community-level average income level, to assess the impact of HSA enrollment on less wealthy customers.¹⁴ **We found that lower contributions are more strongly related than community income to these outcomes.**



Household income

Does the household wealth of Choice Fund HSA customers impact medical cost trends and health management behaviors?

We found that it doesn't appear that this lower-income population is avoiding care, though opportunities do remain for this group to use their plan more wisely. This indicates they would benefit from additional education around seeking appropriate care.

More important, households with smaller total contributions into their Choice Fund HSA, regardless of the income levels found in their neighborhoods:

- › Exhibited poorer health management
 - More hospital admissions
 - More avoidable ER visits
 - Fewer preventive care visits
 - Fewer logins to myCigna.com
 - Marginally greater total medical cost trend
- › However when they sought non-emergency care, they made better shopping decisions to retain their limited financial assets with their choices in where they receive health services.
 - Greater use of in-network services
 - Greater use of Cigna Care Designated¹⁵ providers
 - Greater use of COE preferred providers/facilities for invasive procedures

Given the correlation of contributions to outcomes, these insights represent an opportunity for employers to further consider executing on incentivizing strategies which encourage increased contributions to their employees' HSAs.

In a separate study looking at customer experience, we found that Net Promoter Scores (NPS) across our book of business are actually more favorable among the higher-risk population vs. the healthier population.¹⁶ We have observed this result consistently for years and it can in part be attributed to this group having more interactions with Cigna to reflect upon.

Coupled with the correlation between HSA contributions and health management behaviors, this finding demonstrates how Choice Fund can positively influence consumer behaviors, while leading to more satisfied customers, even among the higher-risk population.

SECTION 3

TRANSITIONING TO CDHPS

Because CDHPs are a relatively new plan design, they require learning on the part of customers, providers, benefits managers and insurers. For consumers in particular, different segments of the population are likely to learn and adjust to the plan at various speeds.



Transition success

Will the success with quickly transitioning from a traditional plan offering to a full-replacement CDHP vary across different portions of the workforce?

We next examined how many years it takes for CDHP customers to successfully transition from traditional plans to CDHPs, and which groups take longer than others. We divided the employee population into spending categories (quartiles) based on their spending the prior year in a traditional plan.

THEORETICAL SPEND WITH SWITCH TO CDHP

In theory, CDHPs should facilitate everyone having lower expenditures, but the spend **category** (quartile relative to one's peers) should be the same, assuming everyone experiences the same "reduction" in spend.

However, from our years of CDHP analysis, we have found that many people in their first year under a CDHP switch spend categories (e.g., low to medium-low or high to low). This phenomenon suggests that the reduction in spend is not a smooth linear trend for everyone.

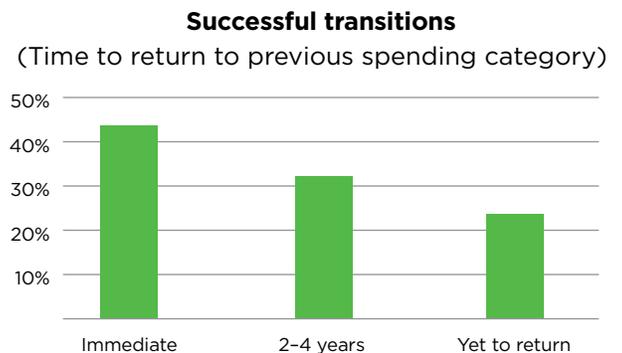
Therefore, we measured success as the CDHP year in which customers return to their relative spend baseline, thus representing that they had acclimated to the new plan offering.

We analyzed five years of data on 11 employers who made full-replacement (at least 95% of the membership) transitions to CDHPs in 2010 from traditional plans.

Successful transitions were made by:

- ▶ Nearly half (44%) immediately
- ▶ Another third (32%) took two to four years to return to the same quartile
- ▶ The remaining 24% had yet to return by their fourth year in a CDHP

From that information, we developed a segmentation predictive model that was nearly 70% accurate in predicting transition success during the first year in a CDHP plan. The level of precision for the model is above the 60% threshold used by other predictive models in the industry.¹⁷



Key drivers

The key drivers (during the final year in a traditional plan) determining the timing of successful transitions to CDHP (in order of predictive power):

1. Health risk
2. Outpatient surgery utilization
3. Hospital admission
4. Gender
5. Having dependents (when gender and dependents are considered together, they have a stronger impact than when applied individually)

TARGETED EDUCATION: PILOT STUDY

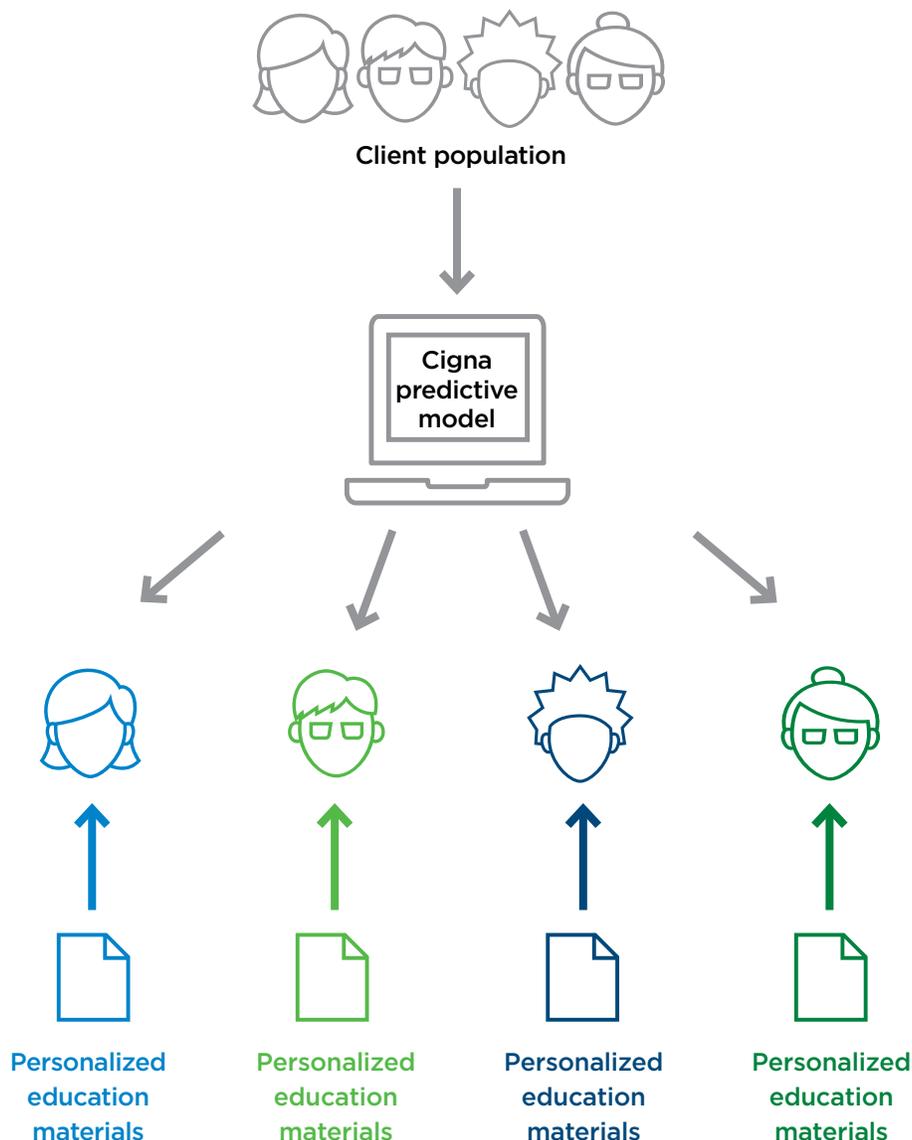
Identification of these drivers will enable us to develop targeted communication strategies to help the different segments of the population reach success sooner. Our next step is to conduct a pilot study of targeted messaging effectiveness.

Our first pilot participant is a large national employer; we aim to add more pilot employers in 2015. Applying the results of our predictive model to the first employer's customer profile under their traditional plan in 2013, we determined that this employer has four distinct segments to which we will tailor our educational materials for the pilot study. Each segment will be receiving a targeted marketing campaign, with communications designed to expedite the customer reaching success more quickly than the model predicts.

PILOT PROCESS

Evaluate spending over subsequent years.

Determine whether time to transition success with targeted education is better than predicted with model.



SECTION 4

FUTURE OF CDHPS

Cigna views Consumer-driven Health Plans as the cornerstone of a successful consumer engagement strategy. They represent an effective way to activate customers to better understand and manage their health and health spending.

Large employers in 2015

(1,000 or more employees)

- › 82% offer CDHPs
- › Nearly 1/3 anticipate going full-replacement (70% or more of the membership enrolled in a CDHP)¹⁹

The challenge of health care affordability will continue to be a top concern for employers and customers and is causing dramatic changes to our health care delivery system. The industry is rapidly evolving from a fee-for-service system to a pay-for-performance model to align the goals and incentives to achieve better outcomes at lower costs.

For example, Cigna's accountable care model, known as the Cigna Collaborative Care (CCC) initiative, provides financial incentives to physician groups and integrated delivery systems to improve the quality and efficiency of care for patients in commercial open-access benefit plans. Registered nurses who serve as care coordinators employed by participating practices are a central feature of the initiative. These professionals use patient-specific reports and practice performance reports provided by Cigna to improve care coordination, identify and close care gaps, and address other opportunities for quality improvement. Early results of Cigna's CCC revealed favorable trends in total medical costs and quality of care, suggesting that a shared-savings accountable care model and collaborative support from the payer can enable medical practices to take meaningful steps toward full accountability for care quality and efficiency.¹⁸

Consumer-driven
Health Plans

Accountable care
organizations



THE GOAL
Better care
Lower costs

At Cigna, we view CDHPs and Accountable Care Organizations (ACOs) as complementary strategies that should be leveraged together to achieve optimal results. When combined, they align the incentives of both the customer and the physician toward improving health and reducing costs. As the pay-for-performance models continue to evolve, it will be important that elements remain that will allow consumers to continue to have transparency of the costs of the services. The outstanding business question to be answered is whether CDHP enrollees have better health outcomes and cost trends relative to enrollees in other health plan designs (i.e., PPO, FFS, and HMO) when paired with ACOs that do not have any financial savings account tied to it. Therefore, future research should look at the health behavior and outcomes of CDHP enrollees engaged in physician outcome-based reimbursement arrangements. As membership continues to increase in both ACO models as well as CDH plans we should soon have enough data to perform a credible study on the combined populations.

Advances in technology will continue to spur innovation in health care - opening new channels for delivery and improving customer experience. Technology has enabled the launch of the public exchange for individuals as well as numerous private exchange platforms that employers are evaluating. CDHPs will play a prominent role on these exchanges, particularly the private exchanges. Technology also enables greater personalization of the health care experience for customers, such as mobile app access. Access to real-time, relevant and actionable information helps customers evaluate options and make informed health care decisions. It will also help to expand incentive programs allowing for more creative designs that reward individuals for outcomes (as well as for taking action). It will be important to study the use of technology and results of these programs to understand whether it is adding incremental value to CDHP customers.

We fully expect CDHPs to continue to become more prevalent. The underlying theory of creating more empowered consumers by exposing them to the costs of health care while giving them access to funds to help offset those costs appears to be working. With the evolution of the health care delivery system coupled with the enhancement and expansion of the tools, information and resources available to customers, CDHPs will continue to progress. Individuals will be true "consumers" who choose to receive quality care at lower costs.

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2. Fronstin, Paul. "Characteristics of the Population With Consumer-Driven and High-Deductible Health Plans, 2005-2012". EBRI Notes, 34:4 (April 2013).
3. Mercer. "Modest health benefit cost growth continues as consumerism kicks into high gear." November 19, 2014.
4. Membership data comes from our internal book of business databases reporting as of 12/31/14.
5. Cigna. "7th Annual Choice Fund Experience Study." 2013. The Cigna Choice Fund Experience Study is a multiyear comparative analysis of utilization, claim and cost trend data for two groups of customers: Those in traditional PPO/HMO plans (the control group) and those in Cigna Choice Fund CDHPs.
6. Cigna Corporation. "8th Annual Choice Fund Experience Study." 2014. The Cigna Choice Fund Experience Study is a multiyear comparative analysis of utilization, claim and cost trend data for two groups of customers: those in traditional PPO/HMO plans (the control group) and those in Cigna Choice Fund CDHPs.
7. RAND Corporation. "Skin in the Game: How Consumer-Directed Plans Affect the Cost and Use of Health Care." RAND Health Research Highlights. 2012.
8. RAND Corporation. "High-Deductible Health Plans Pose No Special Risks to Medically Vulnerable Populations." RAND News Releases, April 18, 2011.
9. Haviland, Amelia M., Sood, Neeraj, McDevitt, Roland and Marquis, M. Susan. "How Do Consumer-Directed Health Plans Affect Vulnerable Populations?" Forum for Health Economics & Policy, 14:2 (2011).
10. We selected full-replacement CDHPs to mitigate the effects of employee plan choice selection bias. We were unable to mitigate employer-level selection bias; therefore differences in the customer profiles could be a function of the workforce associated with industries. The HSAs contained more financial services companies, whereas the HRA group was comprised of both financial services and manufacturing industries. We attempted to adjust for this employer mix difference in our regression analyses, by using household income as a proxy for affluence.
11. We assessed the one-year impact of plan type on cost trends and employee engagement using covariate adjusted regression models. Gender, and 2011 age, health risk score, number of admissions, number of ER visits, median household income of Zip code and employer contribution percentage of annual deductible (except we had insufficient employer contribution data for the HSA non-integrated group).
12. For the per customer total medical cost change from 2011 to 2012, we used difference-in-difference linear models, and for our measures of engagement (compliance in 2011 or 2012 of using Cigna-designated – Centers of Excellence [COE] instead of other locations for invasive procedures, and myCigna logins in 2012) we used logistic regressions.
13. Internal Cigna Pricing Study, 2014.
14. Using covariate adjusted regression modeling of their 2011 to 2012 experience.
15. The Cigna Care Designation is awarded to in-network physicians who meet certain Cigna quality and cost-efficiency measures.
16. Internal Cigna Enterprise NPS study, 2013.
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18. Salmon, Richard B., Sanderson, Mark I., Walters, Barbara A., Kennedy, Karen, Flores, Robert C. and Muney, Alan M. "A Collaborative Accountable Care Model In Three Practices Showed Promising Early Results On Costs And Quality Of Care." Health Affairs, 31:11 (2012): 2379-2387.
19. Towers Watson - National Business Group on Health (NBGH) Employer Survey, 2014.



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