

#### Issue Brief #12

September 2016

# **Consumer-Driven Health Plans: A Cost and Utilization Analysis**

A consumer-driven health plan (CDHP), also known as a consumer-directed health plan, is a health insurance plan design increasingly prevalent in the United States. CDHPs are a specific type of high-deductible health plan generally including a health savings account (HSA) or a health reimbursement arrangement (HRA).2 Compared to traditional commercial health plans—such as a health maintenance organization (HMO), preferred provider organization (PPO), or point of service (POS) plan type—CDHPs typically have lower premium rates in exchange for higher minimum deductibles and higher maximum out-of-pocket limits.3 Though benefit designs vary from plan to plan, these higher minimum deductibles generally require more consumer dollars to be spent out of pocket before the insurer begins to pay a portion of the costs. When deductibles are met, cost sharing between the insurer and consumer begins, and the insurer becomes responsible for a larger percentage of the consumer's incurred medical expenses. Thus, higher minimum deductibles generally lead to higher consumer yearly maximum out-of-pocket burdens.

Through these higher minimum deductibles, CDHPs attempt to alter their consumers' behavior by placing greater monetary responsibility on consumers in the hopes of reducing the use of unnecessary care and spending. <sup>4</sup>

CDHP enrollment has been increasing steadily within HCCI's employersponsored insurance (ESI) population since 2010 (see Membership by plan type in the HCCI study population). According to the Kaiser Health Benefits survey, 13% of covered workers were enrolled in some sort of high-deductible health plan in 2010. By 2014, that number had risen to 20% of covered workers, an increase of more than 50%. This growing prevalence highlights the importance of better understanding the trends in spending and utilization for CDHP consumers, and how they compare to their non-CDHP counterparts.

This issue brief examined the total spending, utilization, and out-of-pocket spending trends for individuals who are covered by ESI and younger than 65 years, with CDHPs and with non-CDHPs, between the years 2010 and 2014 (the "study period"). Consumers were iden-

#### **KEY FINDINGS**

In every year studied, the non-CDHP population had total per capita spending higher than the CDHP population.

The CDHP population had rates of utilization 9%-13% lower than the non -CDHP population for all categories of health services outside of brand prescriptions, which was 21% lower.

The CDHP population spent an average annual \$343 per capita more out of pocket than did the non-CDHP population.

The non-CDHP population was responsible for an average of 14% of their medical costs out of pocket, whereas the CDHP population paid for 24% of their medical costs.

tified by their insurer as being covered by a CDHP and then separated into two populations: the non-CDHP population and the CDHP population (see Data and Methods). Spending trends for these populations do not include information on premium payments, and this issue brief does not examine the potential impacts of premiums on health care trends. By examining the non-CHDP and CDHP populations side by side, we highlighted the similarities and differences in the spending and utilization trends for the two populations.

#### **Study limitations**

This issue brief presents cost and utilization trends for the national ESI population younger than age 65 covered by either CDHP or non-CDHP insurance design. This work should be viewed as a starting point in the examination of these trends. There are many factors that influence how and where people seek health care and how much they pay for it. HCCI does not have data on premiums, the range of insurance options offered by employers, the actual benefit design of plans, or employer contributions to any Health Saving Account (HSA) or Health Reimbursement Account (HRA). Additionally, there are likely selection effects that influence the choice of insurance plan (where one exists) and how an individual uses their plan. We also did not risk adjust to account for potential population differences. These omitted factors likely have an important impact. Future research should consider how these factors influence cost and utilization trends of the privately insured.



### Per capita spending lower in CDHP population

Over the study period, spending per capita (total expenditure divided by the number of individuals covered by the plan type) for the non-CDHP population was higher than that for the CDHP population (Figure 1). Beginning with the initial study year of 2010, the difference in per capita spending between the two populations increased every year. In 2014, per capita spending for the non-CDHP population was \$659 greater than that for the CDHP population: \$5,140 and \$4,481, respectively (Table 1). Over the study period, the CHDP population had per capita spending lower than that of the non-CDHP population across all categories of health services and nearly all demographic groups. This section compared differences in per capita spending between the two populations for various demographic groups and categories of health services.

For both men and women in the non-CDHP population, spending per capita

was higher as compared to the spending per capita for the CDHP population. Within each population, women had higher spending than did men. Interestingly, both female populations spent roughly the same percentage more than did their respective male counterparts. On average, across all 5 years, per capita spending for women covered by CDHPs was 1.25 times greater than that for men having a CDHP (Table 1). For non-CDHP consumers over the same time frame, spending per capita for women was, on average, 1.28 times higher than that for men. These similar proportions suggest that plan type played only a small role in spending differences by gender (see Plan type may not impact one gender more than the other for additional discussion).

As seen in Exhibit 1, the three oldest age groups (ages 26–44, 45–54, and 55–64) displayed ratios similar to the national benchmark, whereas the spending ratios for the youngest age groups (ages 18 and younger; ages 19–25) were lower than the national benchmark. This suggests that per capita spending differences be-

tween plan types were larger for the older age groups than for the youngest.

Exhibit 1. Average Per Capita Spending Ratio, by Age (2010 -2014)

Age Group	Per Capita Spending Ratio
Total Study Population	1.12
Ages 18 and Younger	1.06
Ages 19-25	0.99
Ages 26-44	1.12
Ages 45-54	1.13
Ages 55-64	1.11

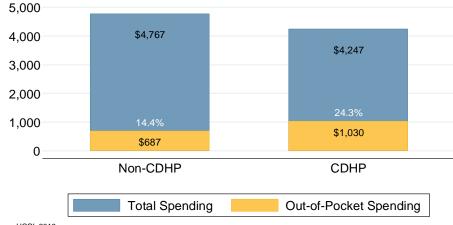
Source: HCCI, 2016. Note: Spend ratio is calculated as the 5-year non-CDHP per capita spend average divided by the 5-year CDHP per capita spend average, Table 1.

For the group ages 18 and younger, the 5-year average spending ratio was 1.06. Even more striking, for ages 19 to 25, the average spending ratio was less than 1.00. The average per capita spending rate was slightly higher in the CDHP population than in the non-CDHP population for 19 to 25-year-olds, the only age group in which that trend was observed (for additional discussion see, Ages 19–25 Was an Outlier Group).

Beyond demographics, we examined the differences in the per capita dollars spent on categories of health services for the two populations. We divided health care services into four service categories: inpatient admissions, outpatient services, professional services, and prescriptions. These service categories were divided into subservice categories, which in turn were composed of detailed service categories.<sup>5</sup>

When examining the per capita spending differences by service category, the largest differences in spending between the two populations were for prescriptions. Over the study period, the non-CDHP population had average annual spending on prescriptions \$190 greater than that of the CDHP population (Table 2). In eve-

Figure 1
2010-2014 Average Annual Total Spending Per Capita,
Out-of-Pocket Spending Per Capita, and Share
of Cost, by Plan Type



Source: HCCI, 2016. Notes: All data weighted to reflect the national, younger than 65 ESI population. Data from 2013 and 2014 adjusted using actuarial completion.



ry year since 2012, the difference in per capita spending on prescriptions between the two populations widened. The largest difference was in 2014, when the per capita spending on prescriptions for the non-CDHP population was \$959, as compared to \$715 per capita for the CDHP population (a difference of \$244 dollars). Prescriptions also had the largest relative per capita spending difference of any service category between the two populations. On average, across the 5-year study period, the non-CDHP population had per capita spending on prescriptions that was 28% higher than that for the

CDHP population. For comparison, spending per capita by the non-CDHP population was 9% greater, on average, than that of the CDHP population for the other three categories of services combined.

In 2014, the \$244 difference between the two populations in per capita spending on prescriptions was largely due to spending on brand prescriptions (Table 2). The non-CDHP population had spending per capita on brand prescriptions that was \$164 higher than that for the CDHP population. In comparison, spending per capita on generic prescriptions for the

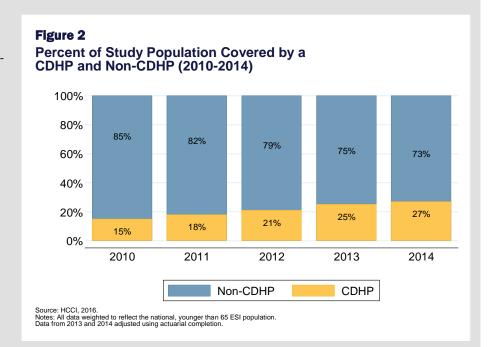
non-CDHP group was \$79 higher than spending for the CDHP population. In terms of dollars, the difference between the non-CDHP and CDHP per capita spending was more than twice as large on brand prescriptions as on generic prescriptions in 2014. Compared to this large difference in dollars spent on brand versus generic prescriptions, the relative difference between the populations in per capita spending on these two types of prescriptions was much smaller. Spending per capita for the non-CDHP population on brand prescriptions was 35% higher than that for the CDHP popu-

#### Membership by plan type in the HCCI study population

In every year studied, the percentage of the HCCI population covered by a CDHP increased. In 2010, the CDHP population made up 15% of the ESI population younger than 65 (Table 11 and Figure 2). By 2014, that number increased to 27% of the ESI population. The percentage of the CDHP population that was male versus female was relatively similar, and these proportions changed little over the study period. In 2014, the age group with the largest percentage covered by a CDHP was ages 18 and younger (29% of the age group), whereas the group ages 55 to 64 had the smallest percentage enrolled in a CDHP (24% of the age group). For every age group, the percentage of those covered by a CDHP increased in each year studied.

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The number of non-utilizers (consumers who had a health insurance plan but did not file a claim in a given year) was also



examined. A larger percentage of the non-CDHP population did not have a claim, as compared to the CDHP population. In 2014, 28% of the total non-CDHP population did not file a claim, as compared to 25% of the total CDHP population (Table 12). This difference was largest for the 19- to 25-year group. In 2014, 38% of the CDHP 19- to 25-year-old population did not file a claim, and 46% of the non-CDHP 19- to 25-year-olds did not.



lation. For generic prescriptions, the non-CDHP population had per capita spending that was 32% higher than that for the CDHP population.

Across the four service categories, the second largest difference in average per capita spending was on inpatient admissions. The non-CDHP population had annual average per capita spending that was 15% higher than such spending for the CDHP population (Table 2). In 2014, spending per capita on inpatient admissions for the non-CDHP population was \$139 more than for their CDHP counterparts. The difference in per capita spending between the populations was driven largely by the spending differences on inpatient surgical admissions and inpatient medical admissions. Of the \$139 spending difference, \$69 resulted from

the difference in spending for surgical admissions, and \$49 came from inpatient medical admissions (Table 3). Surgical admissions also had the highest per capita spending of any detailed service category for both populations. In 2014, per capita spending on surgical admissions was \$526 for the non-CDHP population and \$457 for the CDHP population.

### Utilization rates lower in CDHP population

As mentioned above, CDHPs are designed to lower health care expenditures by moderating utilization. These plans use minimum deductibles that are higher than traditional health plans, which can raise consumers' cost of utilizing services. <sup>4</sup> Theoretically, the effect of the higher deductible limit is to minimize

both the use of and spending on unnecessary health services. This section examined the utilization trends of categories of health services by our CDHP study population and compared them to those of the non-CDHP study population.

For every service and subservice category, across all the years studied, the population of consumers covered by a CDHP had utilization rates lower than those of the non-CDHP population. As with per capita spending above, examining only the simple differences between the two populations' utilization rates could result in incomplete conclusions. For a clearer description of the utilization differences between populations, we examined the 'utilization ratio' between the CDHP and the non-CDHP populations. The utilization ratio was created by dividing the 5-

#### Ages 19-25 was an outlier group

Of the 5 age groups, the group ages 19 to 25 was the only age group studied that had higher per capita spending for the CDHP population than for the non-CDHP population. Across the 5-year study period, spending for the 19- to 25-year-olds was an average annual 1% (\$26) higher for the CDHP population (Table 1). Similarly, out-of-pocket per capita spending for this age group was also higher for the CDHP population. The CDHP population spent 81% more out of pocket per capita, as compared to the non-CDHP population (Table 9). This was the largest difference in out-of-pocket spending between the two populations ob-

served for any age group. The ages 19 to 25 CDHP population also bore the highest share of cost of any of the age groups studied. Over the 5 years studied, the CDHP population at ages 19 to 25 paid an average of 30% of their medical costs out of pocket, as compared to just 17% for the non-CDHP 19- to 25-year-olds (Tables 1 and 9).

Additionally, among all age groups studied, the group ages 19 to 25 had the lowest non-CDHP-to-CDHP 'utilization ratio' across every service category (see Exhibit 2). The CDHP population, on average, used more outpatient and professional services than did the non-CDHP population, while having similar rates of filled days of prescriptions (Tables 6 and 7). Examination of this age group's utilization ratios by gender revealed that the male non-CDHP and CDHP

Exhibit 2. Average Non-CDHP to CDHP Utilization Ratio, by Age and Service Category (2010 - 2014)

Age Group	Inpatient Admissions		Professional Services	Prescriptions
Total Study Population	1.15	1.11	1.11	1.15
Ages 18 and Younger	1.09	1.07	1.05	1.09
Ages 19-25	1.03	0.97	0.99	1.00
19-25 Men	1.07	1.01	1.02	1.04
19-25 Women	1.03	0.94	0.97	0.97
Ages 26-44	1.13	1.07	1.13	1.14
Ages 45-54	1.20	1.09	1.11	1.16
Ages 55-64	1.17	1.11	1.11	1.17

Source: HCCI, 2016. Note: Utilization ratio is calculated as the 5-year non-CDHP utilization average divided by the 5-year CDHP utilization average, Tables 6 and 7.

utilization rates were generally similar (ratios slightly more than 1.00; see Exhibit 2). However, the female ratios for the majority of services were less than 1.00, suggesting a higher rate of use for the women who had a CDHP. In three of the four service categories, the female ratio was less than or equal to 0.97, with the lowest ratio (0.94) occurring in outpatient services.



Exhibit 3. Average CDHP to Non-CDHP Utilization Ratio, by Service and Subservice Category (2010 - 2014)

Service Category	Non-CDHP Population	CDHP Population	Utilization Ratio (CDHP/Non-CDHP)
Inpatient	60	52	0.87
Acute Inpatient	57	50	0.88
Outpatient	2,953	2,664	0.90
Outpatient Visits	327	297	0.91
Outpatient-Other	2,626	2,368	0.90
Professional Services	16,580	14,972	0.90
Prescriptions - Filled Days	287,100	249,559	0.87
Brands	60,243	47,383	0.79
Generics	226,810	202,159	0.89

Source: HCCl, 2016. Note: Utilization ratio is calculated as the 5-year non-CDHP utilization average divided by the 5-year CDHP utilization average, Table 4.

year average CDHP utilization rate by the 5-year average non-CDHP utilization rate for each service and subservice category. Given that the CHDP population had lower utilization across all services as compared to the non-CDHP population, every utilization ratio was less than 1.00. Therefore, a high ratio—close to 1.00—would indicate that the CHDP population had a utilization rate similar to that of the non-CDHP population. A lower ratio, farther from 1.00, suggests a larger difference in the two populations' utilization rates. For example, the utilization ratio for inpatient admissions was calculated as the study

period's average CDHP inpatient admissions utilization rate (52 admissions per 1,000 individuals) divided by the average non-CDHP rate (60 admissions per 1,000 individuals; Table 4). The ratio (0.87) indicates that the CDHP population, on average, used 13% fewer inpatient admissions than did the non-CDHP population each year.

As seen in Exhibit 3, the differences in utilization between the two populations were fairly consistent across service categories. Outside of brand prescriptions, average utilization rates of the CDHP population were 9% to 13% lower (utilization

ratio range of 0.87–0.91) than the rates of the non-CDHP population for every other service and subservice category.

Only brand prescriptions (a ratio of 0.79) had a considerably lower utilization ratio (Exhibit 3). The CDHP population used an average annual 21% fewer filled days per 1,000 individuals of brand prescriptions than did the non-CDHP population. Brand prescriptions had the lowest utilization ratio (i.e., the largest difference in utilization between the two populations), whereas generic prescriptions had a ratio (0.89) similar to that of the medical service categories.

We also observed low utilization ratios (compared to the 0.87–0.91 range for medical service categories) within the detailed categories of brand prescriptions. Every brand prescription detailed category had a utilization ratio lower than 0.87, the minimum value in the utilization ratio range. The detailed category of brand prescriptions with the largest utilization ratio (the smallest difference in average annual use between the two populations) was brand respiratory drugs (0.84; Table 5). The CDHP population utilized 16% fewer filled days of brand respiratory drugs than did the non-CDHP

#### Plan type may not Impact one gender more than the other

As discussed in previous HCCI reports, per capita spending, out-of-pocket spending per capita, and service utilization rates tended to be higher for women than for men. As CDHPs are designed to affect both spending and utilization, we compared the trends for men and women to look for differences by plan type. When the 'gender ratios' (5-year average female rate divided by the 5-year average male rate) were compared between the two populations, there were small differences in per capita spending, out-of-pocket spending, and utilization.

Over the 5-year study period, the non-CDHP per capita spending gender ratio was 1.25, whereas the CDHP gender ratio was 1.28 (Table 1). The difference between the populations' gender ratios was even smaller for out-of-pocket spending. The non-CDHP per capita out-of-pocket spending gender ratio was 1.34, as compared to 1.36 for the CDHP population (Table 9). Compared to the spending gender ratios, there were slightly larger differences between the two populations' utilization gender ratios for some service categories. Among the four service categories, inpatient admissions had the largest difference between the utilization gender ratios: 1.60 and 1.53 for the CDHP and non-CDHP populations, respectively (Table 8). Professional services had the smallest utilization gender ratio difference. The CDHP population had a utilization gender ratio of 1.47, as compared to 1.45 for the non-CDHP population. Overall, little evidence suggested differential spending and use trends between genders by plan type.



population each year on average. The smallest utilization ratio (0.66; the largest difference in average annual use between the two populations) was brand gastrointestinal drugs. The CDHP population filled, on average, 34% fewer filled days of brand gastrointestinal drugs each year, as compared to those for the non-CDHP population.

In general, over the study period, there were declines in the rates of utilization of services for both populations. In each year studied, for the two populations, utilization of inpatient admissions, outpatient services, and filled days of brand prescriptions declined (Table 4). In the final study year (2014), utilization rates of professional services for both populations were higher than in the initial study year (2010). However, utilization of professional services by the CDHP population declined from 2012 onward, and from 2013 onward for the non-CDHP population. In contrast, in every year studied, both populations had increasing rates of utilization of filled days of generic prescriptions.

Across the service and subservice categories, the changes in utilization rates during the study period differed in both direction and magnitude. To analyze the changes in utilization of service catego-

ries, the 'change in utilization ratio' was calculated for the non-CDHP and CDHP populations (Exhibit 4). For each service and subservice category, by plan type, the 2014 utilization rate was divided by the 2010 utilization rate. The changes in utilization differed widely by service and subservice category (Exhibit 4). For example, for the CDHP population, there was an 11% decrease in inpatient admissions and a 2% increase in outpatient visits.

Of all the service and subservice categories, brand and generic prescriptions had the largest percentage changes in their utilization rates. Over the study period, utilization of filled days of brand prescriptions decreased by 48% for the non-CDHP population and by 53% for the CDHP population. In contrast, use of filled days of generic prescriptions increased by approximately 25% for both populations.

The changes in utilization between 2010 and 2014 for each of the categories of services were relatively similar for the CDHP population, as compared to the non-CDHP population. For each service category, the two populations' change in utilization ratios were compared to examine the similarities between their utilization trends. For all medical service and subservice categories and generic prescrip-

tions, the difference between the non-CDHP change in utilization ratio and the CDHP change in utilization ratio was less than 2% (Exhibit 4). For brand prescriptions, the difference between the change in utilization ratios was slightly higher, a difference of 5%. Over the study period, these observed changes in the utilization of each health service category have been in the same direction and at similar rates of change for both populations.

## Out-of-Pocket spending substantially higher in the CDHP population

The principal feature of CDHPs is higher minimum deductibles, which may lead to consumer out-of-pocket expenditures greater than those typically faced by consumers with non-CDHPs. However, it is also possible that the lower utilization rates for the CDHP population (discussed above) may lead to correspondingly lower out-of-pocket expenses. In this section, we compared the out-of-pocket per capita spending rates for both populations, finding higher per capita out-of-pocket spending by the CDHP population, as compared to that of the non-CDHP population (Figure 1).

The non-CDHP population had total per capita spending higher than that of the CDHP population across all categories of health services and almost all demographics groups. For consumer per capita out-of-pocket spending, the opposite trend was observed, with the CDHP population having out-of-pocket spending rates consistently higher than those of the non-CDHP population. Over the 5year study period, the population covered by a CDHP spent an average annual \$343 per capita more out of pocket than did the non-CDHP population (Table 9 and Figure 1). Between 2012 and 2014, average per capita out-of-pocket spending for the CDHP population was more than 1.5

Exhibit 4. 2010 to 2014 Change in Utilization, by Service and Subservice Categories

Service Category	Non-CDHP	CDHP
Inpatient	-11%	-11%
Acute Inpatient	-8%	-9%
Outpatient	-1%	-1%
Outpatient Visits	1%	2%
Outpatient-Other	-1%	-1%
Professional Services	3%	1%
Prescriptions - Filled Days	3%	4%
Brands	-48%	-53%
Generics	23%	25%

Source: HCCI, 2016. Note: The change in utilization was calculated by dividing the 2014 utilization rate by the 2010 utilization rate, for each population, Table 4.



times greater than such spending for their non-CDHP counterparts. For example, in 2014, the CHDP population's per capita out-of-pocket spending was \$1,083, as compared to \$709 for the non-CDHP population.

This relationship between the two populations' per capita out-of-pocket spending was also observed when considering gender and age groups. In every year examined, the CDHP population, for both genders and all 5 age groups, had per capita out-of-pocket spending higher than that of the corresponding non-CDHP population. Similar to the total per capita spending comparisons between genders, women spent more per capita out of pocket than did men. Also as with total per capita spending, both the non-CHDP and the CDHP female populations' per capita out-of-pocket costs were roughly the same percentage greater than that of their respective male counterparts. The 5-year average female-to-male 'out-ofpocket spending ratio' (the average female out-of-pocket spending rate divided by the average male out-of-pocket spending rate) for the CDHP population was 1.36; for the non-CDHP population it was 1.34 (Table 9). We did not find that the type of health plan substantially impacted the out-of-pocket spending trends of one gender more than the other.

The CDHP population had higher out-of-pocket spending than did the non-CDHP population for every age group in every year. To better understand the differences across age groups in spending between plan types, we calculated the 5 age groups' 'out-of-pocket spending ratios' (5-year average CDHP out-of-pocket spending rate divided by the 5-year average non-CDHP out-of-pocket spending rate, for each age group) and compared them to the total ESI population out-of-pocket benchmark ratio. Across the study period, the out-of-pocket spending ratio

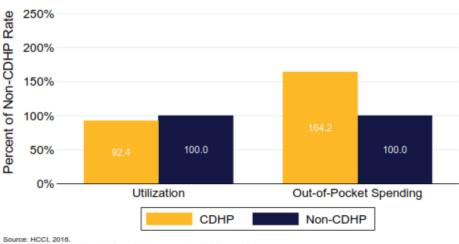
for the total study population was 1.50: average annual out-of-pocket spending of \$1,030 for the CDHP population and \$687 for the non-CDHP population (Table 9). Out-of-pocket spending for the two populations became more similar to each other with increased age. Of the three oldest age groups, only 26- to 44-year-olds had an out-of-pocket ratio (1.57) greater than the national benchmark. The two oldest age groups had out-of-pocket ratios of 1.43 and 1.38, respectively.

The two youngest age groups (younger than 18 and 19–25) had out-of-pocket spending ratios considerably higher than the national benchmark ratio. For the youngest age group (ages 0–18), the out-of-pocket spending ratio was 1.68 (Table 9). The out-of-pocket spending ratio for the 19- to 25-age group was 1.81, the largest ratio of any age group. These ratios indicate that the CDHP population in these two age groups spent a yearly average of 68% and 81%, respectively, more out of pocket per capita than did their non-CDHP counterparts (see Ages 19–25 was an Outlier Group).

Per capita out-of-pocket spending for the CDHP population was greater than the out-of-pocket spending for the non-CDHP population for every service and subservice category. Over the study period, the largest differences in per capita outof-pocket spending between the two populations were for professional services (\$185 difference on average) and outpatient services (\$114; Table 10). These two categories also had the highest out-of-pocket spending of any service category for both populations. On average, across the 5-year study period, per capita out-of-pocket spending on professional services amounted to \$294 for the non-CDHP population and \$479 for the CDHP population. For outpatient services, per capita out-of-pocket spending was \$172 and \$286 for the non-CDHP and CDHP populations, respectively.

Among the detailed service categories, doctor's visits had the highest per capita out-of-pocket spending for both populations and the largest out-of-pocket spending difference between the populations. Over the study period, the CDHP population spent, on average, \$58 more

Figure 3
2010-2014 Average Doctor Visits Utilization and Out-of-Pocket Per Capita Spending CDHP Rate Compared to Non-CDHP Rate

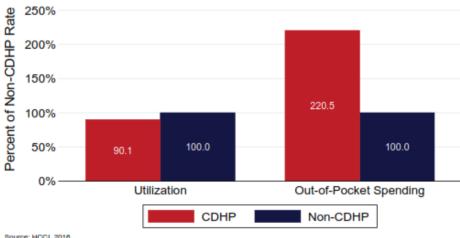


Source: HCCI, 2016.

Notes: All data weighted to reflect the national, younger than 65 ESI population Data from 2013 and 2014 adjusted using actuarial completion.



Figure 4
2010-2014 Average ER Visits Utilization and Out-of-Pocket Per Capita Spending CDHP Rate Compared to Non-CDHP Rate



Source: HCCI, 2016.

Notes: All data weighted to reflect the national, younger than 65 ESI population.
Data from 2013 and 2014 adjusted using actuarial completion.

out of pocket per capita on visits to the doctor than did their non-CDHP counterparts (Table 10). The emergency room (ER) visits detailed category had the second largest difference in average per capita out-of-pocket spending between the CDHP and non-CDHP populations: a difference of \$50 more for the CDHP population per year, on average. In contrast to the higher out-of-pocket per capita spending, over the study period, the CDHP population annually had a lower utilization rate of ER visits and doctor's visits than that of the non-CDHP population (Table 4). On average, the CDHP population had 10% fewer ER visits, whereas they spent 2.21 times more per capita out-of-pocket than did their non-CDHP counterparts (Figure 2). For doctor's visits, the CDHP population utilized, on average, 8% fewer visits than did the non-CDHP population but spent 1.63 times more out of pocket per capita (Figure 3).

Generally, the CDHP population had higher out-of-pocket spending and lower total per capita spending than did the nonCDHP population. This led to considerable differences between the populations when the "share of cost" was examined. Share of cost was measured as the proportional amount of the spending per capita on health services that individual consumers paid out of pocket. Share of cost was calculated as per capita out-of-pocket spending divided by per capita total spending. As shown in Exhibit 5, the share of cost for the non-CDHP population averaged 14% per year across the study period. The CDHP population, however, was responsible for an average of 24% of their total per capita costs (Figure 1).

Exhibit 5. Average Share of Costs, by Service Category (2010 - 2014)

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Service Category	Non-CDHP	CDHP
All Services	14%	24%
Inpatient Admissions	5%	6%
Outpatient Services	13%	24%
Professional Services	18%	32%
Prescriptions	20%	31%

Source: HCCI, 2016. Note: Share of cost is calculated as the 5-year per capita out-of-pocket spending average divided by the 5-year total per capita spend average, Tables 1 and 2 and Tables 9 and 10.

Examining by service categories revealed that the share of costs borne by the CDHP population on professional services and prescriptions was more than 30% of the total per capita spending on those services per year, on average (Exhibit 5). Professional services had the highest share of cost for the CDHP population (32% on average). In contrast, for the non-CDHP population, the largest share of cost was for prescriptions (20% on average). The share of costs for both populations was lowest on inpatient admissions. The CDHP population paid 6% of the per capita inpatient spending out of pocket, compared to 5% for the non-CDHP population. Overall, on all the service categories, the CDHP population had a share of cost higher than that of the non-CDHP population.

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#### **Conclusion**

Across the study period, the CDHP population had lower total per capita spending, as compared to that of the non-CDHP population. The CDHP population had, on average, annual per capita spending that



was \$520 less than that of the non-CDHP population (Table 1). That pattern of comparatively higher total spending for the non-CDHP population was observed for all health service categories and nearly all demographic groups. Those differences in total per capita spending arose in part from differences in utilization across the populations. For all service and subservice categories, outside of brand prescriptions, the CDHP population used approximately 10% fewer services as compared to use by the non-CDHP population each year (Table 4). For brand prescriptions, the CDHP population used more than 20% fewer filled days than did the non-CDHP population.

Although the CDHP population generally had lower total per capita spending (excluding premiums) and utilization rates, as compared to the non-CDHP population, the opposite was true of out-ofpocket spending. Over the study period, the CDHP population spent, on average, \$343 more out of pocket per capita than did the non-CDHP population each year (Table 9). For the majority of the study period (2012-2014), the CDHP population's per capita out-of-pocket costs were more than 1.5 times higher than those for the non-CDHP population. The CDHP population's per capita spending rates combined with higher out-of-pocket costs resulted in the larger share of cost differences between the two populations. Though the non-CDHP population was responsible for roughly 14% of their medical costs on average, the CDHP population paid for 24% of their medical costs out-ofpocket (Table 1 and Table 9). Overall, the CDHP population tended to have lower total per capita spending and utilization rates, but higher out-of-pocket spending in comparison to those of the non-CDHP population.

#### **Data and Methods**

This issue brief used an analytic dataset that consisted of population weighted and aggregated claims data for people younger than age 65 and covered by ESI for calendar years 2010 to 2014. The analytic dataset was derived from health care claims for 40 million Americans per year contributed by three national insurers. This was the same data set used by HCCI for the 2014 Health Care Cost and Utilization Report. All data used for this study were de-identified and compliant with the Health Insurance Portability and Accountability Act.

An individual in the HCCI analytic dataset was flagged by their insurer as having been enrolled in a CDHP. This flag was assessed each year of the study period. This divided the total study population into two populations: CDHP members and non-CDHP members. A third group also identified in the study population was composed of individuals belonging to an unknown type of health plan. This group totaled approximately 2% of the total study population in each year studied. For this study, the individuals in the unknown group were added to the non-CDHP study population, ensuring that this study's population is comparable to populations in other HCCI reports. Therefore, these two populations—individuals having a CDHP and individuals without a CDHPare similar but not methodologically identical.

The trends for the two study populations were analyzed by per capita spending, utilization of health services, and out-of-pocket spending. All trends presented here should be treated as population estimates.

For this study, HCCI did not seek to determine what role premiums, services covered, or specific aspects or changes in benefit designs played in the spending and utilization rates observed.

Claims for 2013 and 2014 were adjusted using actuarial completion to account for claims incurred but not adjudicated. HCCI used these weighted and adjusted claims to calculate total and out-of-pocket expenditures for 2010 through 2014. HCCI did not correct dollars for inflation; thus, all reported expenditures are in nominal dollars. For a more detailed description of the analytic dataset and methods used in this study, see 2014 Health Care Cost and Utilization Report and the corresponding methodology document, available on the HCCI Website.

#### **Endnotes**

- 2015 Employer Health Benefits Survey. The Henry J. Kaiser Family Foundation, September 22, 2015. <a href="http://kff.org/report-section/ehbs-2015-summary-of-findings/">http://kff.org/report-section/ehbs-2015-summary-of-findings/</a>
- "Consumer-Directed Health Care: The Employer Perspective." National Business Group on Health, May 2013. https:// www.businessgrouphealth.org/pub/cccf5d3f-782-cb6e-2763-c5b829541408
- A commonly accepted monetary definition of a high-deductible health plan is produced by the Internal Revenue Service. For the year 2014, the IRS defined high-deductible health plans as plans with an annual deductible that is not less than \$1,250 for individuals or \$2,500 for families. https://www.irs.gov/pub/ irs-drop/rp-13-25.pdf
- "Health Policy Brief: High-Deductible Health Plans." Health Affairs, February 4, 2016. <a href="http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief">http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief</a> id=152
- 5. Four service categories of health services were identified: inpatient facility, outpatient facility, professional services (the medical service categories), and prescriptions. HCCI also reports on five subservice categories: acute inpatient, outpatient visits, outpatient-other services, generic prescriptions, and brand prescriptions. Each of these subservice categories were further broken down into various detailed subservice categories. For a full list of the detailed service categories, see the 2014 Health Care Cost and Utilization Report.
- "2014 Health Care Cost and Utilization Report." Health Care Cost Institute, Inc., October 2015. Web.



### Table 1. Per Capita Spending for CDHP and Non-CDHP Populations

	2010	2011	2012	2013	2014
CDHP Population					
Per Capita	\$3,962	\$4,124	\$4,268	\$4,399	\$4,481
Per Capita by Gender					
Men	\$3,462	\$3,611	\$3,712	\$3,856	\$3,939
Women	\$4,450	\$4,622	\$4,807	\$4,922	\$5,005
Per Capita by Age					
18 and Younger	\$2,157	\$2,278	\$2,346	\$2,430	\$2,500
19-25	\$2,299	\$2,429	\$2,579	\$2,665	\$2,778
26-44	\$3,485	\$3,607	\$3,795	\$3,860	\$3,883
45-54	\$5,127	\$5,297	\$5,526	\$5,711	\$5,859
55-64	\$7,712	\$8,049	\$8,139	\$8,385	\$8,590
Non-CDHP Population					
Per Capita	\$4,401	\$4,598	\$4,765	\$4,932	\$5,140
Per Capita by Gender					
Men	\$3,881	\$4,080	\$4,220	\$4,375	\$4,586
Women	\$4,901	\$5,095	\$5,291	\$5,474	\$5,678
Per Capita by Age					
18 and Younger	\$2,187	\$2,374	\$2,489	\$2,617	\$2,721
19-25	\$2,240	\$2,426	\$2,549	\$2,651	\$2,752
26-44	\$3,870	\$4,016	\$4,197	\$4,323	\$4,467
45-54	\$5,755	\$5,993	\$6,212	\$6,412	\$6,669
55-64	\$8,579	\$8,863	\$9,026	\$9,320	\$9,746

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All per capita dollars from allowed amount. All figures rounded.



Table 2. Per Capita Spending for CDHP and Non-CDHP Populations,

by Service Category

	2010	2011	2012	2013	2014
CDHP Population					
Inpatient	\$827	\$852	\$862	\$894	\$898
Acute Inpatient	\$814	\$843	\$853	\$886	\$890
Outpatient	\$1,097	\$1,162	\$1,221	\$1,279	\$1,310
Visits	\$673	\$720	\$762	\$801	\$823
Other	\$424	\$442	\$459	\$478	\$488
Professional Procedures	\$1,420	\$1,469	\$1,507	\$1,535	\$1,557
Prescriptions	\$618	\$641	\$677	\$690	\$715
Brands	\$414	\$439	\$441	\$448	\$469
Generics	\$204	\$202	\$236	\$243	\$246
Non-CDHP Population					
Inpatient	\$927	\$968	\$984	\$1,012	\$1,037
Acute Inpatient	\$908	\$953	\$970	\$999	\$1,024
Outpatient	\$1,167	\$1,241	\$1,314	\$1,369	\$1,434
Visits	\$709	\$756	\$806	\$843	\$890
Other	\$458	\$485	\$508	\$526	\$544
Professional Procedures	\$1,512	\$1,576	\$1,620	\$1,674	\$1,711
Prescriptions	\$794	\$812	\$847	\$877	\$959
Brands	\$536	\$560	\$561	\$578	\$633
Generics	\$258	\$251	\$286	\$300	\$325

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All per capita dollars from allowed amount. All figures rounded.

Table 3. Per Capita Spending on Inpatient Admissions for CDHP and Non-CDHP Populations, by Detailed Service Category

	2010	2011	2012	2013	2014
CDHP Population					
Hospice	\$2	\$2	\$2	\$2	\$1
Labor and Delivery	\$71	\$77	\$82	\$86	\$88
Medical	\$237	\$253	\$256	\$267	\$261
Mental Health and Substance Use	\$24	\$28	\$29	\$33	\$33
Newborns	\$47	\$44	\$47	\$49	\$50
Skilled Nursing Facility	\$5	\$5	\$5	\$5	\$6
Surgery	\$435	\$441	\$438	\$451	\$457
Ungroupable	\$6	\$2	\$2	\$1	\$1
Non-CDHP Population					
Hospice	\$2	\$2	\$2	\$2	\$2
Labor and Delivery	\$77	\$82	\$87	\$92	\$96
Medical	\$277	\$298	\$301	\$304	\$310
Mental Health and Substance Use	\$27	\$33	\$34	\$35	\$37
Newborns	\$41	\$45	\$47	\$52	\$55
Skilled Nursing Facility	\$7	\$7	\$7	\$7	\$7
Surgery	\$485	\$494	\$501	\$515	\$526
Ungroupable	\$11	\$6	\$5	\$4	\$3

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All per capita dollars from allowed amount. All figures rounded.



Table 4. Utilization per 1,000 Insureds for CDHP and Non-CDHP Populations. by Sarvice Catagory

ulations, by Service Category

	2010	2011	2012	2013	2014
CDHP Population					
Inpatient	55	53	52	51	49
Acute Inpatient	53	51	50	50	48
Outpatient	2,643	2,680	2,689	2,680	2,629
Visits	291	296	299	301	296
Emergency Room Visits	152	156	164	165	166
Other	2,352	2,384	2,390	2,380	2,333
Professional Procedures	14,709	14,964	15,175	15,106	14,905
Doctor's Visits	3,131	3,179	3,181	3,221	3,160
Prescriptions - Filled Days	241,211	247,468	253,696	254,222	251,196
Brands	65,136	57,868	45,531	37,736	30,643
Generics	176,067	189,587	208,141	216,475	220,526
Non-CDHP Population					
Inpatient	63	62	60	58	56
Acute Inpatient	60	59	57	56	55
Outpatient	2,941	2,983	2,985	2,949	2,907
Visits	323	330	331	326	325
Emergency Room Visits	172	178	183	178	181
Other	2,617	2,653	2,654	2,623	2,583
Professional Procedures	16,181	16,403	16,707	16,880	16,729
Doctor's Visits	3,386	3,434	3,421	3,496	3,441
Prescriptions - Filled Days	283,990	284,569	286,571	289,122	291,248
Brands	81,193	71,839	57,416	48,873	41,894
Generics	202,768	212,697	229,101	240,203	249,280

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



Table 5. Utilization per 1,000 Insureds of Prescriptions for CDHP and Non-CDHP Populations, by Detailed Service Category

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	2010	2011	2012	2013	2014
CDHP Population					
Brands – Filled Days	65,136	57,868	45,531	37,736	30,643
Anti-Infective Agents	1,371	1,321	1,186	1,156	1,092
Cardiovascular Drugs	19,057	16,924	11,398	8,779	6,397
Central Nervous System Agents	12,183	10,603	8,130	6,874	4,756
Eye, Ear, Nose, Throat Preparations	3,603	2,949	2,531	2,264	1,707
Gastrointestinal Drugs	2,949	2,535	2,378	2,144	1,627
Hormones and Synthetic Substitutes	13,632	13,853	10,455	9,557	8,704
Other Therapeutic Classes	7,796	5,397	4,108	3,420	3,153
Respiratory Drugs	2,967	2,780	4,002	2,521	2,395
Skin and Mucous Membrane Agents	1,580	1,504	1,344	1,021	812
Generics – Filled Days	176,067	189,587	208,141	216,475	220,526
Anti-Infective Agents	10,004	10,363	10,553	10,313	10,008
Cardiovascular Drugs	44,312	48,302	54,950	56,929	58,585
Central Nervous System Agents	45,505	50,051	55,254	57,206	58,431
Eye, Ear, Nose, Throat Preparations	4,141	5,123	5,808	6,035	6,277
Gastrointestinal Drugs	5,955	7,079	7,895	8,290	8,505
Hormones and Synthetic Substitutes	32,683	34,896	37,072	39,022	40,543
Other Therapeutic Classes	28,794	28,853	30,163	30,153	29,526
Respiratory Drugs	663	779	2,112	3,975	4,101
Skin and Mucous Membrane Agents	4,010	4,141	4,335	4,553	4,549
Non-CDHP Population					
Brands – Filled Days	81,193	71,839	57,416	48,873	41,894
Anti-Infective Agents	1,896	1,839	1,624	1,561	1,487
Cardiovascular Drugs	24,123	21,181	14,217	11,263	8,731
Central Nervous System Agents	15,255	13,342	10,582	9,264	6,752
Eye, Ear, Nose, Throat Preparations	4,218	3,523	3,135	2,893	2,421
Gastrointestinal Drugs	4,212	3,601	3,511	3,390	2,826
Hormones and Synthetic Substitutes	16,264	16,496	12,671	11,942	11,650
Other Therapeutic Classes	9,793	6,801	5,175	4,292	4,138
Respiratory Drugs	3,564	3,263	4,829	2,977	2,858
Skin and Mucous Membrane Agents	1,868	1,794	1,672	1,291	1,032
Generics – Filled Days	202,768	212,697	229,101	240,203	249,280
Anti-Infective Agents	11,050	11,381	11,487	11,330	11,145
Cardiovascular Drugs	50,691	53,380	59,739	62,658	66,160
Central Nervous System Agents	54,343	58,507	63,141	65,420	67,788
Eye, Ear, Nose, Throat Preparations	4,477	5,384	6,033	6,307	6,666
Gastrointestinal Drugs	7,725	8,506	9,132	9,765	10,383
Hormones and Synthetic Substitutes	36,004	37,392	38,925	40,841	42,647
Other Therapeutic Classes	33,206	32,620	33,427	34,054	34,250
Respiratory Drugs	798	941	2,389	4,572	4,759
Skin and Mucous Membrane Agents	4,476	4,588	4,829	5,255	5,482

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



Table 6. Utilization per 1,000 Insureds for the CDHP Population, by

**Age & Service Category** 

	2010	2011	2012	2013	2014
CDHP Population					
Inpatient	55	53	52	51	49
18 and Younger	39	39	37	37	36
19-25	41	41	43	43	42
Men	19	22	23	23	24
Women	64	61	62	63	60
26-44	60	59	58	56	54
45-54	51	49	47	47	44
55-64	86	83	79	79	76
Outpatient	2,643	2,680	2,689	2,680	2,629
18 and Younger	1,250	1,273	1,298	1,291	1,277
19-25	1,513	1,565	1,609	1,618	1,649
Men	1,014	1,069	1,100	1,106	1,163
Women	2,014	2,067	2,127	2,142	2,143
26-44	2,314	2,343	2,391	2,355	2,288
45-54	3,601	3,673	3,678	3,692	3,641
55-64	5,290	5,352	5,278	5,233	5,138
Professional Procedures	14,709	14,964	15,175	15,106	14,905
18 and Younger	10,617	10,914	10,989	11,048	11,041
19-25	8,980	9,235	9,631	9,705	9,974
Men	5,540	5,854	6,260	6,414	6,825
Women	12,431	12,660	13,050	13,063	13,168
26-44	13,727	13,972	14,443	14,201	13,929
45-54	17,862	18,237	18,576	18,577	18,364
55-64	23,485	23,757	23,564	23,351	22,774
Prescriptions - Filled Days	241,211	247,468	253,696	254,222	251,196
18 and Younger	67,660	68,605	69,958	69,256	66,645
19-25	118,254	118,654	123,579	127,058	128,386
Men	57,390	58,634	61,446	62,311	61,113
Women	181,646	181,173	187,398	193,091	195,863
26-44	184,621	186,054	191,062	191,155	188,401
45-54	352,948	360,247	368,517	371,371	375,011
55-64	596,996	607,289	607,098	601,047	602,070

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



Table 7. Utilization per 1,000 Insureds for the Non-CDHP Population, by Age & Service Category

	2010	2011	2012	2013	2014
Non-CDHP Population					
Inpatient	63	62	60	58	56
18 and Younger	40	41	41	41	42
19-25	43	45	45	43	41
Men	21	25	25	24	24
Women	65	66	65	63	59
26-44	68	67	65	62	61
45-54	62	61	58	53	51
55-64	102	100	94	90	87
Outpatient	2,941	2,983	2,985	2,949	2,907
18 and Younger	1,332	1,365	1,385	1,371	1,361
19-25	1,450	1,534	1,569	1,574	1,561
Men	1,001	1,086	1,117	1,141	1,141
Women	1,890	1,980	2,023	2,015	1,989
26-44	2,509	2,524	2,548	2,506	2,474
45-54	3,973	4,025	4,019	3,972	3,910
55-64	5,917	5,994	5,889	5,818	5,670
Professional Procedures	16,181	16,403	16,707	16,880	16,729
18 and Younger	10,940	11,343	11,543	11,786	11,747
19-25	8,734	9,124	9,505	9,749	9,818
Men	5,514	5,943	6,309	6,701	6,956
Women	11,892	12,288	12,708	12,854	12,734
26-44	15,398	15,598	16,024	16,127	15,954
45-54	19,878	20,107	20,485	20,731	20,515
55-64	25,784	25,831	25,908	26,070	25,625
Prescriptions - Filled Days	283,990	284,569	286,571	289,122	291,248
18 and Younger	73,720	74,413	75,541	75,604	74,423
19-25	122,500	120,302	122,633	124,965	123,608
Men	61,742	61,654	63,473	63,984	62,421
Women	181,845	178,263	181,507	186,786	185,892
26-44	211,673	212,294	214,698	217,117	215,878
45-54	417,770	420,889	424,872	429,784	436,201
55-64	705,500	706,654	704,947	704,157	708,650

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



Table 8. Utilization per 1,000 Insureds for CDHP and Non-CDHP Populations, by Gender & Service Category

2010	2011	2012	2013	2014
42	41	39	39	38
2,183	2,210	2,205	2,204	2,168
11,851	12,055	12,206	12,217	12,080
201,256	207,167	212,607	212,405	209,209
67	66	64	63	61
3,091	3,137	3,159	3,140	3,075
17,498	17,791	18,052	17,893	17,641
280,367	286,802	293,472	294,517	291,646
49	48	47	45	44
2,456	2,498	2,493	2,467	2,429
13,083	13,297	13,582	13,810	13,681
241,395	242,709	244,990	246,845	248,478
76	75	73	70	68
3,406	3,448	3,459	3,418	3,372
19,157	19,387	19,720	19,865	19,693
324,819	324,724	326,567	330,084	332,735
	42 2,183 11,851 201,256 67 3,091 17,498 280,367 49 2,456 13,083 241,395 76 3,406 19,157	42 41 2,183 2,210 11,851 12,055 201,256 207,167  67 66 3,091 3,137 17,498 17,791 280,367 286,802  49 48 2,456 2,498 13,083 13,297 241,395 242,709  76 75 3,406 3,448 19,157 19,387	42 41 39 2,183 2,210 2,205 11,851 12,055 12,206 201,256 207,167 212,607  67 66 64 3,091 3,137 3,159 17,498 17,791 18,052 280,367 286,802 293,472  49 48 47 2,456 2,498 2,493 13,083 13,297 13,582 241,395 242,709 244,990  76 75 73 3,406 3,448 3,459 19,157 19,387 19,720	42       41       39       39         2,183       2,210       2,205       2,204         11,851       12,055       12,206       12,217         201,256       207,167       212,607       212,405         67       66       64       63         3,091       3,137       3,159       3,140         17,498       17,791       18,052       17,893         280,367       286,802       293,472       294,517         49       48       47       45         2,456       2,498       2,493       2,467         13,083       13,297       13,582       13,810         241,395       242,709       244,990       246,845         76       75       73       70         3,406       3,448       3,459       3,418         19,157       19,387       19,720       19,865

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



# Table 9. Out-of-Pocket Per Capita Spending for CDHP and Non-CDHP Populations

	2010	2011	2012	2013	2014
CDHP Population					
Per Capita	\$953	\$973	\$1,058	\$1,081	\$1,083
Per Capita by Gender					
Men	\$807	\$824	\$891	\$913	\$915
Women	\$1,095	\$1,117	\$1,219	\$1,243	\$1,245
Per Capita by Age					
18 and Younger	\$564	\$589	\$643	\$660	\$668
19-25	\$714	\$726	\$790	\$798	\$815
26-44	\$958	\$982	\$1,072	\$1,088	\$1,095
45-54	\$1,163	\$1,180	\$1,281	\$1,314	\$1,323
55-64	\$1,534	\$1,535	\$1,654	\$1,693	\$1,673
Non-CDHP Population					
Per Capita	\$659	\$681	\$689	\$699	\$709
Per Capita by Gender					
Men	\$560	\$580	\$586	\$597	\$607
Women	\$754	\$778	\$789	\$797	\$808
Per Capita by Age					
18 and Younger	\$349	\$366	\$374	\$383	\$394
19-25	\$407	\$424	\$434	\$425	\$431
26-44	\$626	\$651	\$669	\$673	\$692
45-54	\$842	\$870	\$876	\$892	\$905
55-64	\$1,152	\$1,180	\$1,167	\$1,190	\$1,179

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All per capita dollars from allowed amount. All figures rounded.



# Table 10. Out-of-Pocket Per Capita Spending for CDHP and Non-CDHP Populations, by Service Category & Select Detailed Categories

	2010	2011	2012	2013	2014
CDHP Population					
Inpatient	\$50	\$51	\$52	\$61	\$60
Acute Inpatient	\$50	\$51	\$52	\$60	\$60
Outpatient	\$250	\$260	\$288	\$309	\$324
Visits	\$146	\$154	\$172	\$187	\$198
Emergency Room Visits	\$73	\$78	\$93	\$103	\$113
Other	\$104	\$106	\$116	\$121	\$126
Professional Procedures	\$443	\$453	\$491	\$499	\$510
Doctor's Visits	\$137	\$141	\$151	\$160	\$163
Prescriptions	\$209	\$208	\$227	\$213	\$188
Brands	\$118	\$114	\$112	\$100	\$86
Generics	\$91	\$94	\$115	\$113	\$102
Non-CDHP Population					
Inpatient	\$42	\$44	\$45	\$48	\$47
Acute Inpatient	\$41	\$44	\$45	\$47	\$47
Outpatient	\$152	\$164	\$173	\$180	\$193
Visits	\$90	\$97	\$102	\$107	\$114
Emergency Room Visits	\$34	\$38	\$42	\$44	\$50
Other	\$62	\$67	\$71	\$74	\$79
Professional Procedures	\$274	\$288	\$293	\$302	\$312
Doctor's Visits	\$88	\$90	\$90	\$95	\$95
Prescriptions	\$190	\$185	\$177	\$168	\$158
Brands	\$99	\$92	\$78	\$69	\$61
Generics	\$91	\$92	\$100	\$99	\$97

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All per capita dollars from allowed amount. All figures rounded.



**Table 11. HCCI Study Population Characteristics by CDHP and Non-CDHP Populations** 

	2010	2011	2012	2013	2014
Percent of Total Study Population with CDHP					
Insureds with CDHP	15%	18%	21%	25%	27%
Population by Gender					
Men	7%	9%	10%	12%	13%
Women	7%	9%	11%	13%	14%
Population by Age	***		-01		
18 and Younger	4%	5%	6%	7%	7%
19-25	1%	2%	2%	2%	3%
26-44	4%	5%	6%	7%	8%
45-54	3%	4%	4%	5%	5%
55-64 Percent of CDHP Population with CDHP	2%	3%	3%	4%	4%
	4000/	4000/	4000/	4000/	4000/
Insureds with CDHP Population by Gender	100%	100%	100%	100%	100%
Men	49%	49%	49%	49%	49%
Women	51%	51%	51%	51%	51%
Population by Age	0170	0.70	0.70	0.70	0170
18 and Younger	28%	27%	27%	27%	27%
19-25	9%	9%	10%	10%	10%
26-44	28%	28%	29%	29%	29%
45-54	21%	20%	20%	20%	20%
55-64	14%	14%	14%	15%	14%
Percent of Total Study Population with Non-CDHP					
Insureds with Non-CDHP	85%	82%	79%	75%	73%
Per Capita by Gender					
Men	42%	40%	39%	37%	36%
Women	44%	42%	40%	38%	37%
Per Capita by Age	000/	040/	000/	400/	400/
18 and Younger	22%	21%	20%	19%	18%
19-25	8%	8%	8%	8%	8%
26-44	25%	23%	22%	21%	20%
45-54 55-64	17%	16%	16%	15%	14%
Percent of Non-CDHP Population with Non-CDHP	13%	13%	13%	12%	12%
•	4000/	4000/	4000/	4000/	4000/
Insureds with Non-CDHP	100%	100%	100%	100%	100%
Per Capita by Gender	400/	400/	400/	400/	400/
Men	49%	49%	49%	49%	49%
Women	51%	51%	51%	51%	51%
Per Capita by Age					
18 and Younger	26%	26%	26%	25%	25%
19-25	9%	10%	10%	11%	11%
26-44	29%	28%	28%	28%	28%
45-54	20%	20%	20%	20%	19%
55-64	16%	16%	16%	16%	17%

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.



Table 12. Percentage of Non-Utilizers within the CDHP and Non-CDHP Populations. by Age

	2010	2011	2012	2013	2014
CDHP Population					
Total Non-Utilizers	24%	23%	22%	23%	25%
Non-Utilizers by Age					
18 and Younger	20%	18%	18%	19%	20%
19-25	38%	35%	35%	36%	38%
26-44	28%	27%	26%	28%	30%
45-54	21%	20%	19%	19%	21%
55-64	16%	14%	15%	15%	17%
Non-CDHP Population					
Total Non-Utilizers	26%	25%	25%	26%	28%
Per Capita by Age					
18 and Younger	22%	21%	21%	21%	23%
19-25	46%	43%	43%	44%	46%
26-44	29%	28%	29%	30%	31%
45-54	21%	20%	20%	21%	22%
55-64	15%	15%	15%	15%	17%

Source: HCCI, 2016

Notes: All data weighted to reflect the national population ages 0-64 and covered by ESI. Data for 2013 and 2014 adjusted using actuarial completion. All figures rounded.

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