


# FACTFILE

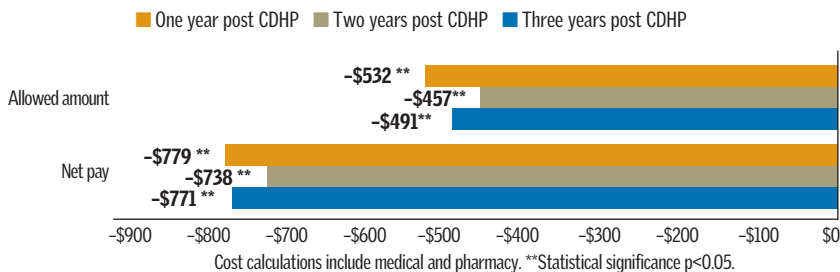
## Impact of Consumer-Directed Health Plans

**Consumer-directed health plans are one of the fastest-growing benefit options for U.S. employees.** A CDHP is a high-deductible preferred provider organization that is combined with either a health reimbursement arrangement or health savings account. Fund contributions are made by plan members or sponsors annually; unused amounts are typically carried over to the next plan year. Participants are encouraged to use decision-support tools to make more informed healthcare decisions and efficiently manage their fund. Truven Health Analytics conducted a study to provide employer and health plan decision-makers, and others in the healthcare industry, with key insights on the effectiveness of CDHPs in terms of multiyear cost, care, and utilization changes. 

### IMPACT OF CDHP ON PMPY COST RELATIVE TO MATCHED COHORT

**CDHP costs were lower than expected (per experience of matched cohort) in all years studied**

On an allowed basis (claims cost to the plan sponsor and member combined), costs trended downward in the initial year of CDHP enrollment, then rose in the subsequent two years but remained below non-CDHP costs in all three years. Based on the experience of the matched cohort, CDHP costs were below expectations by between \$457 and \$532 PMPY over the three years measured. This indicates that the CDHP design had an impact on member behavior that translates to lower costs. CDHP costs were also lower across all years on a net payment basis (plan sponsor cost only).

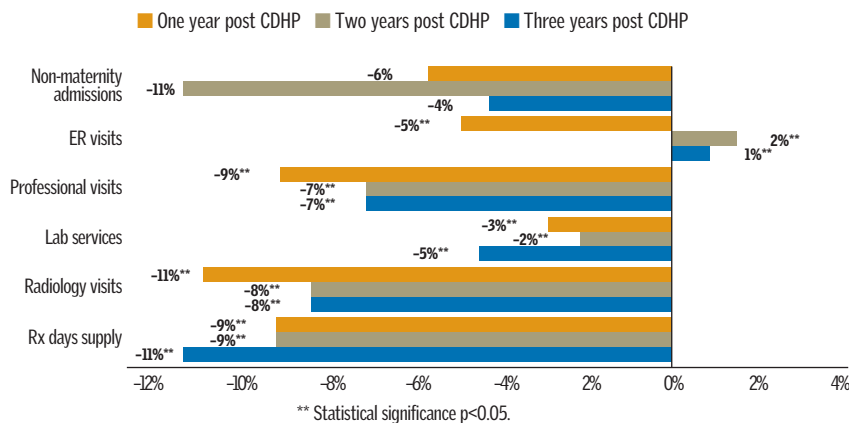


SOURCE: Truven Health Analytics.

### IMPACT OF CDHP ON UTILIZATION RATES RELATIVE TO MATCHED COHORT

**Most CDHP utilization rates were lower than expected (per experience of matched cohort)**

After switching to a CDHP, members experienced lower utilization rates than expected if they had remained in a non-CDHP for professional visits, radiology visits, lab services, non-maternity admissions, and prescription drug days supply. CDHP members also had a statistically significant lower use of radiology services in all three years, including lower rates of MRIs and CAT scans. Use of generic medications was higher in the CDHP cohort after enrollment than in the non-CDHP comparison group. Emergency room use declined in the first year of CDHP enrollment to a rate below expectations (per the experience of the matched cohort), but then increased to rates slightly above expectations in the subsequent two years. However, when looking solely at ER visits for potentially avoidable diagnoses, CDHP ER use was below expectations in all three years.



SOURCE: Truven Health Analytics.

### About the Data

Here is some background regarding data in this report.

- Data are from the proprietary Truven Health MarketScan Commercial Claims Database, which contains the healthcare experience of more than 120 million privately insured individuals spanning 18 years. The database includes information on enrollment, outpatient services, inpatient services, and hospital admissions, as well as prescription drug usage.
- A cohort group of approximately 183,000 continuously enrolled members was followed from 2009 to 2012. These group members were enrolled in a non-CDHP in 2009, and then continuously enrolled in a CDHP in 2010, 2011, and 2012.
- Each enrollee was then carefully matched to an enrollee from a company that did not offer a CDHP during the same time frame. The match selection was based on a propensity score composed of demographics, geographic region, spending, and general health status in 2009. After matching members, the two populations were statistically similar in terms of observable differences. It is necessary to note that there may be unobservable differences in the underlying populations generating selection bias and influencing the results.
- Healthcare cost, utilization, and care metrics were evaluated over the four years, and a difference-in-difference methodology was used to quantify the impact of the CDHP. Regressions were employed to determine the confidence intervals and statistical significance of the difference-in-difference results.

- This study did not include any full-replacement CDHPs, so these results reflect only members who chose a CDHP from a selection of benefit plan options and cannot be extrapolated to determine the effects of a CDHP if that were the only option for a population. The study does not reflect the experience of individuals who initially enrolled in a CDHP and then decided to switch back to a non-CDHP plan option.

■ Link to research brief: [http://images.info.truven-health.biz/Web/TruvenHealthAnalytics/%7B9c165d86-ecc0-4030-96ef-23bc5fb6158b%7D\\_HP\\_15435\\_0415\\_CDHP\\_RB.pdf](http://images.info.truven-health.biz/Web/TruvenHealthAnalytics/%7B9c165d86-ecc0-4030-96ef-23bc5fb6158b%7D_HP_15435_0415_CDHP_RB.pdf)

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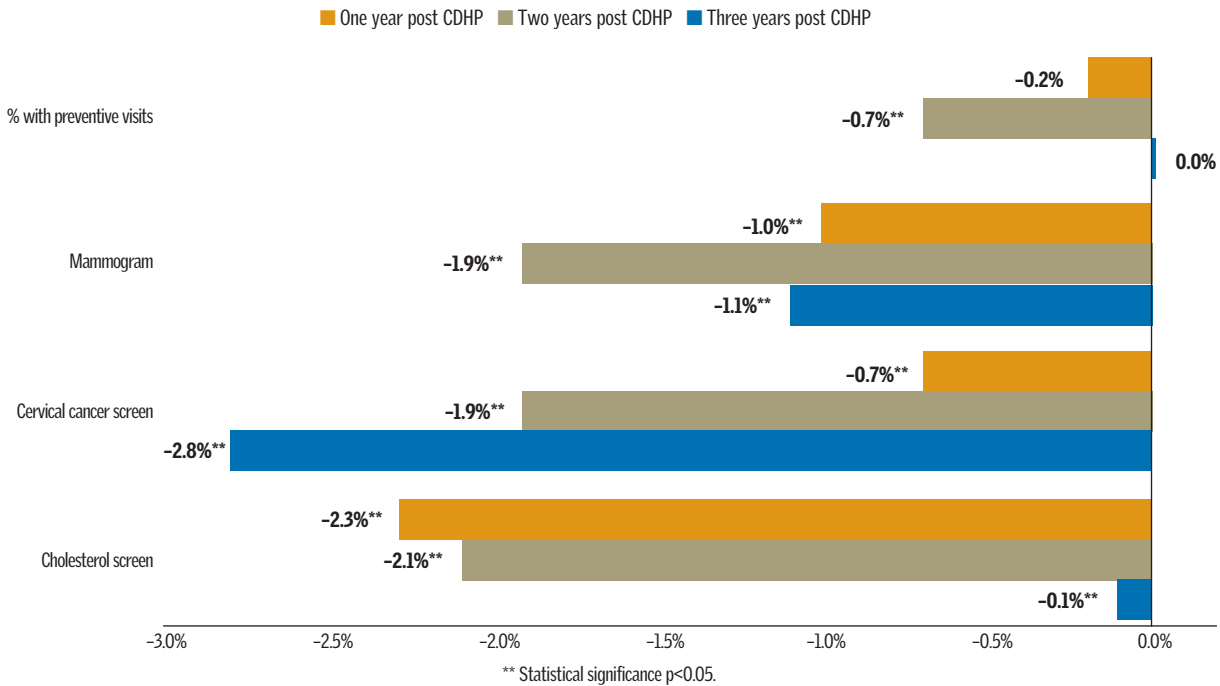
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## IMPACT OF CDHP ON PREVENTIVE CARE RATES RELATIVE TO MATCHED COHORT

### CDHP screening rates were generally lower than expected (per experience of matched cohort)

In 2009 (i.e., the year prior to CDHP enrollment), preventive care and screening rates were higher for the future CDHP members than for the cohort that would remain in non-CDHPs. By the third year post-CDHP enrollment, the CDHP preventive visit and cholesterol screening rates were on par with expectations, while the mammogram and cervical cancer screening rates were below expectations (per the experience of the matched cohort).

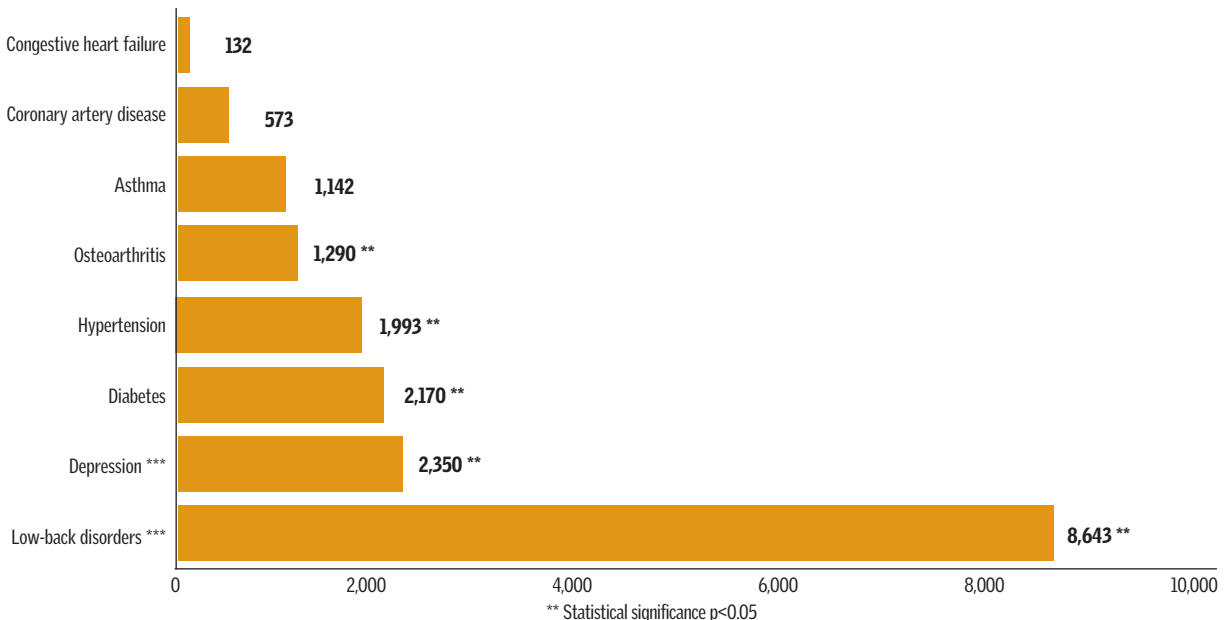


SOURCE: Truven Health Analytics.

## ADDITIONALLY DIAGNOSED MEMBERS, FROM 2010 TO 2012, IN NON-CDHPs RELATIVE TO CDHPs

### Higher number of members with newly diagnosed chronic conditions among non-CDHP population

The incidence of members newly diagnosed with chronic conditions was lower than expected for the CDHP cohort based on the eight conditions reviewed in this study. This could indicate potential underdiagnosis and undertreatment of these chronic conditions under the CDHP design. Alternatively, given that employers often incent members to participate in risk-reduction programs by making a considerable contribution to the member's CDHP HSA, the lower-than-expected incidence rates found in this study could be reflective of lifestyle risk improvements in the CDHP population. Further research is needed to understand the underlying factors driving this result.



SOURCE: Truven Health Analytics.

