EHE HEALTH

WHITE PAPER

Can Increasing Adult Preventive Care Reduce Costs and Lower Medical Trend?

EXECUTIVE SUMMARY

EHE Health commissioned a multi-employer, multi-year claims analysis to measure the impact of its adult preventive health program on healthcare costs, utilization and quality. More than 35,000 adults were represented in the study, including over 10,500 EHE Health users and 10,500 traditional primary care users.

Key findings include:

- **Lower Costs and Trend**
  EHE Health costs averaged 8% lower compared to the employers' general population of adults and 14% below the traditional primary care group who engaged in prevention outside of EHE Health. Medical trend for the EHE Health cohort was -1.3% compared to +4.8% overall for the employers and +6.4% for the traditional primary care group.

- **Fewer Emergency Room and Inpatient Admissions**
  Approximately 26% fewer emergency room visits and well over one-third less non-maternity related inpatient admissions.

- **Complete Care with Higher Participation Rates**
  Preventive screening services, including recommended annual chronic disease testing, flu vaccinations and cancer screening procedures significantly exceeded benchmark performance rates.

These results demonstrate that EHE Health's adult preventive care outperforms traditional primary care and delivers more member value through more complete preventive services, while lowering overall costs and medical trend.

14% Lower **Medical Costs***

26% Fewer **ER Visits**

35% Fewer **Inpatient Admits**

**Compared to the traditional primary care group.*

INTRODUCTION

EHE Health offers large, self-insured employers a comprehensive preventive care program, delivered through a national network of primary care and related providers, focused on working adult age populations where annual preventive care engagement has been below desired levels and/or quality.

EHE Health's services are billed as a bundled fee, meaning that as members engage in their annual exam, a single charge is incurred and covers all of the services described to the right for the 12-month period following the annual preventive exam. Members incur no out-of-pocket costs for the services delivered through EHE Health as part of the bundled fee arrangement.

While various research has addressed the health impact of comprehensive primary care models or selective preventive screening services, an analysis of the role of comprehensive preventive care for adults has not been conducted to assess the overall impact on health care costs.

The results presented in this white paper describe the findings from a two-year analysis of working age adults (ages 25 through 64 years old) for multiple employers. The analysis was designed to address several evaluation questions:

EHE Health program includes:

- A comprehensive annual physical exam performed by a board-certified physician that goes far beyond an annual exam by a primary care doctor
- Risk assessments focused on mental health, physical health, cancer and other health risks
- Comprehensive laboratory testing
- Screening procedures such as mammograms, colonoscopies, calcium CT scans
- Immunizations including annual flu vaccinations, tetanus, MMR, COVID, HPV, Shingles, etc.
- Year-round access to health coaching to address lifestyle changes
- Health navigation services to support patients in post-exam health care needs, including primary care follow-ups, specialist physician referrals and employer well-being program referrals

EVALUATION QUESTIONS

1. How does the health status of the EHE Health participants compare to other adults enrolled in the employers' medical plans who engaged in preventive care outside EHE Health or who did not engage at all?
2. Does EHE Health deliver more of the recommended preventive services compared to traditional primary care?
3. Is the total cost of care for EHE Health participants below Non-EHE Health adult health care users and is the year-over-year medical trend lower for EHE Health?
4. Are the use of emergency room services and non-maternity inpatient admissions by EHE Health users below Non-EHE Health adult health care users?
5. Does the health navigation support available to EHE Health participants translate to greater use of employer well-being solutions?

METHODOLOGY

Working with large national clients who contributed medical, pharmacy and enrollment data to a third-party data warehouse, analyses were performed to address the study questions described above. EHE Health medical record data were also included to support the study in understanding the prevalence of conditions not represented in medical claims data, as well as the use of preventive services not reported as claims, such as screening procedures and immunizations, due to EHE Health's abbreviated bundled billing model. All data were processed and standardized by EHE Health's third-party data warehouse provider to support the various analyses performed.

Inclusion Criteria

Because the EHE Health program includes a year's worth of preventive services following the participant's annual physical exam, continuous eligibility criteria were applied to all eligibles between the ages of 25 and 64 years old. Given the large population available (over 35,000 adults) across the various cohorts being compared, minimum criteria of 18-months of continuous eligibility were applied (that is, 12 months in the first period and at least 6 months in the following period).

Three main cohorts were compared in the analysis:

1. **EHE Health Preventive Users (EHE)**: Those individuals who incurred their annual preventive exam with an EHE Health physician during the analysis period.

2. **Non-EHE Health Preventive Users (Non-EHE):** Those individuals who incurred their annual preventive exam with a primary care provider outside of the EHE Health national network during the analysis period.

3. **No Prevention Users (No Prevention):** Those who incurred claims during the analysis periods who did not use an EHE Health or Non-EHE Health provider for their annual physical exam.

To compare differences in costs, trends and utilization among the cohorts, results are compared to an All Adults population for the employers (which includes the three groups described above).

Claims data presented in this report cover two 12-month periods with Period 1 ending either June or December 2022 and Period 2 ending June or December 2023. Individuals were assigned to a cohort based on their Period 1 status. High-cost claimants, defined as those with $100,000 in paid claims or more, were removed from the analysis to reduce the extreme effects outlier claimants may have on the overall findings.

Cost of Care

The cost of care definition used in the data includes employer and plan member cost-sharing amounts, generally referred to as "allowed amounts" in the health insurance industry. This approach minimizes any differences in costs that may be attributable to plan design changes that occur over time. All dollar figures expressed in this report are expressed in **per user per month terms (PUPM).**

Study Design

As the employers being evaluated represent existing programs in place for several years prior to the start of the study periods, random assignment of individuals to groups (the gold standard in evaluation studies) was not possible. Our analyses were conducted retrospectively, and results were adjusted to account for the age and sex differences among the cohorts. Additional analyses were performed to understand the clinical profiles of each of the groups, using claims data as well as the EHE Health medical record data where information was not represented in the claims data.

FINDINGS

The study population characteristics are presented in Table 1 and demonstrate that the EHE Health cohort is slightly older, more male and with meaningful prevalence of diabetes, hyperlipidemia and hypertension compared to the employers' general adult populations. It should be noted the EHE Health preventive exam identifies many new cases of these and other conditions, which may not be fully reflected in the prevalence of disease measured using claims data. However, meaningful prevalence of chronic conditions present in the EHE Health cohort demonstrates the ability to engage more than the "worried well," a criticism oftentimes levied against wellness-oriented programs where mainly healthy individuals engage. Not surprisingly, Non-EHE Health users are more female, consistent with the pattern of higher preventive engagement among adult women compared to men.

Study Population Characteristics by Cohort (TABLE 1)

	EHE	Non-EHE	No Prevention	All Adults
Cohort size	10,558	10,643	14,267	35,468
Average age	41.3	41.4	39.5	40.6
% Male	60.2%	32.6%	55.4%	50.00%
Chronic Condition Prevalence				
Diabetes	3.0%	4.6%	4.8%	4.2%
Hyperlipidemia	13.4%	16.8%	11.2%	13.5%
Hypertension	10.3%	13.8%	12.2%	12.1%

Cost and Medical Trend Comparisons

Figure 1 illustrates the differences in costs among the cohorts, comparing the results for each period to the All Adults group. After adjusting for age and sex mix differences, EHE Health user costs were 2% and 8% below those of the All Adults group.

PUPM Cost Differences Relative to All Adults (FIGURE 1)

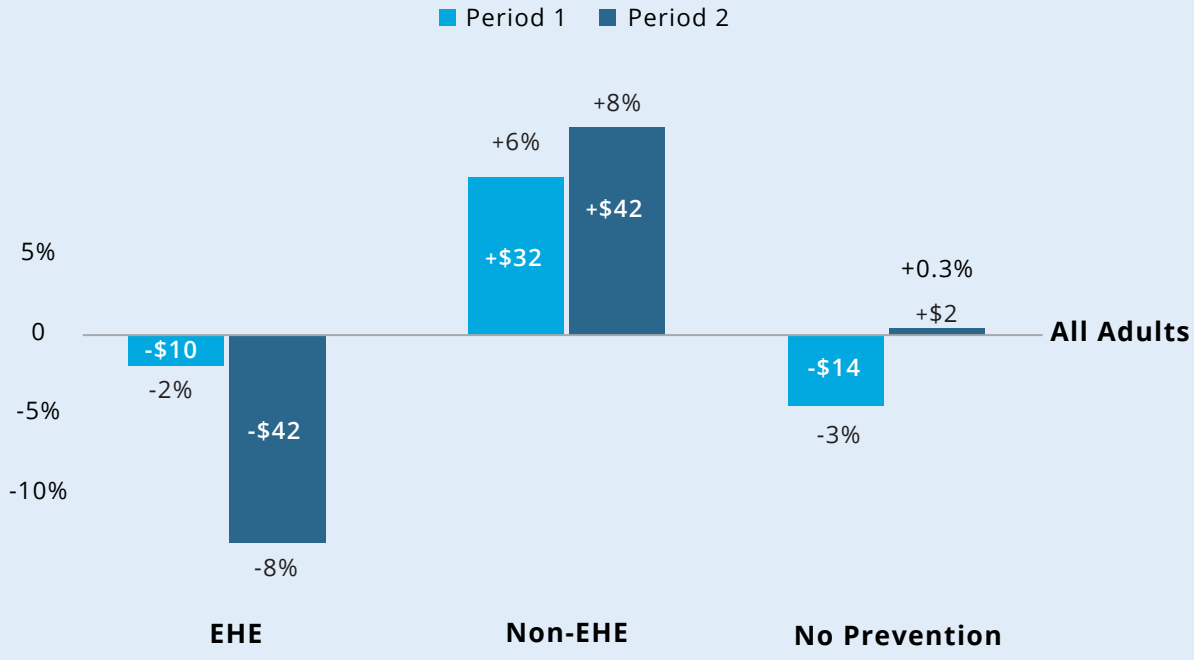
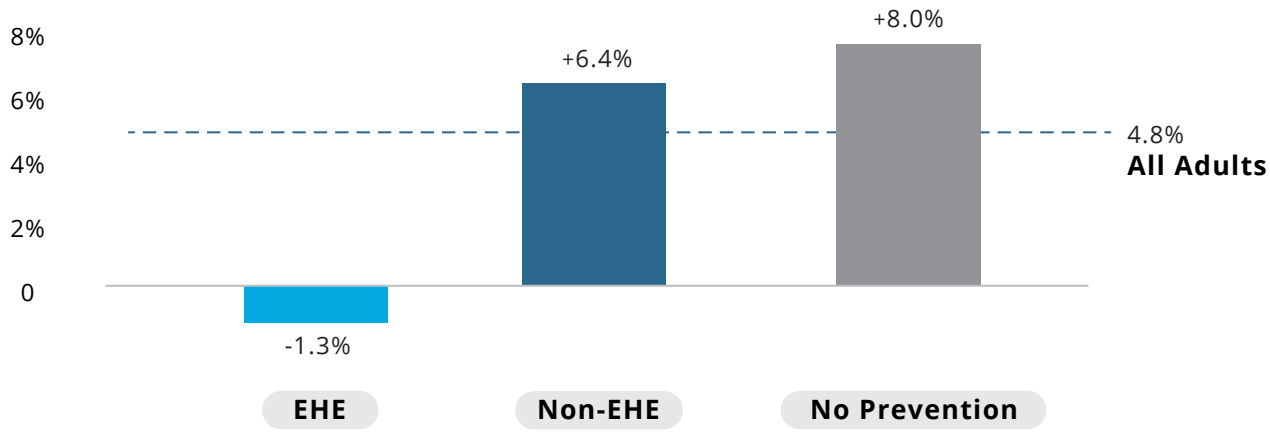


Figure 2 shows the medical trend, defined as the change in PUPMs between Period 1 and Period 2 within each of the groups, and demonstrates that the period-over-period cost change for the EHE Health cohort was the lowest among all groups and for the employers overall.

Period 1 to Period 2 Cost Changes (Figure 2)



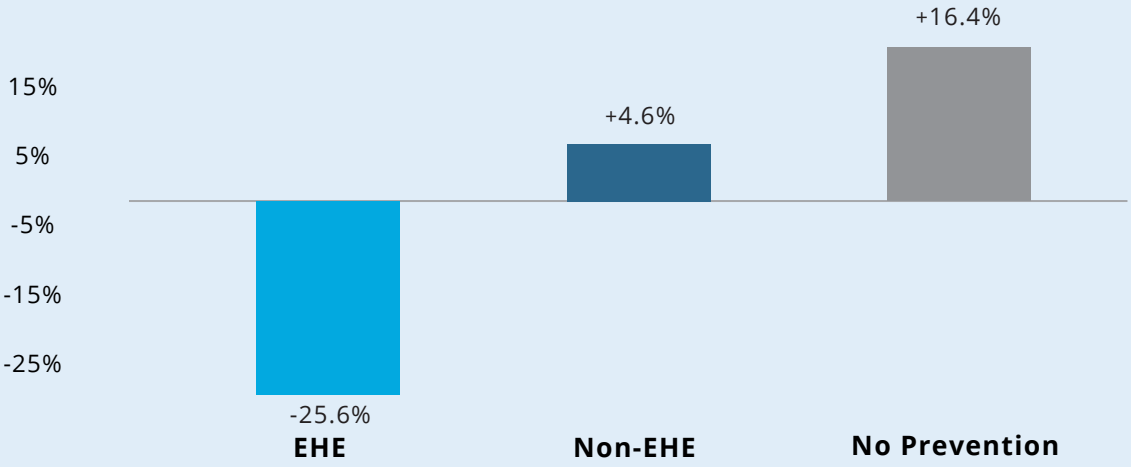
Selected Utilization Measure Comparisons

To further understand factors contributing to the differences in costs described earlier, emergency room (ER) use rates and non-maternity related inpatient rates were compared across the groups. Non-maternity related admissions included medical admissions, surgical admissions, mental health and substance abuse related admissions and excluded maternity related admissions (vaginal deliveries, C-sections and NICU stays), as the rates of these admissions are not expected to be influenced by access to preventive care. For reference, ER costs per visit average approximately $2,600. For these employers, the average costs of admissions represented in the non-maternity inpatient category ranged from a low of $7,212 (for mental health) to a high of $70,841 (for surgical) with a weighted mean value of $33,919.

Emergency Room Utilization

For the periods analyzed, the overall use rate for ER visits by adults for the employers, expressed in a per 1,000-member basis, was 103.2 visits per 1,000. This level of use is already well below commercial utilization rates known to exceed 150 ER visits per 1,000. As the results in Figure 3 illustrate, engaging members in preventive primary care can achieve even lower ER utilization rates, with the EHE Health cohort more than 25% below the employers' adult average of 103.2 per 1,000.

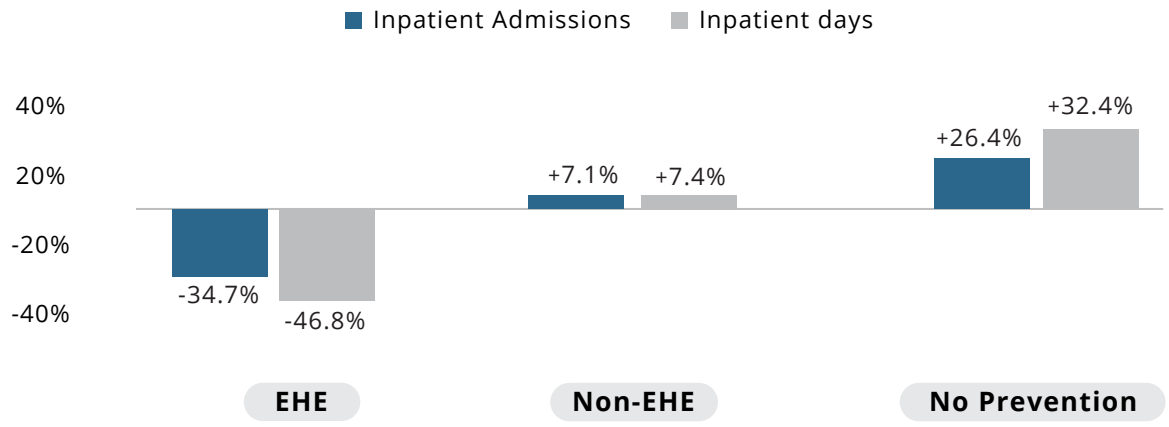
Emergency Room Utilization Differences Relative to All Adults (Figure 3)



Non-Maternity Related Inpatient Utilization

Figure 4 shows the significantly lower rates of non-maternity related admissions and days observed for the EHE Health cohort when compared to All Adult users for the employers. The results for both the EHE Health and Non-EHE cohorts demonstrate the importance of preventive care in reducing rates of hospitalization in adult populations.

Non-Maternity Related Inpatient Admission and Days Differences Relative to All Adults (Figure 4)



High-Cost Claimants

As previously noted, high-cost claimants (individuals whose total paid claim amounts exceeded $100,000 in the year) were excluded from the PUPM amounts and the period over period cost changes described above. Given these employers have offered EHE Health preventive care for several years, additional analysis was performed to compare the incidence of high-cost claimants for each cohort.

With an overall incidence rate for the employer of 9.0 per 1,000, the results for the EHE Health cohort were significantly lower at almost half of the employers' overall incidence rate for adults, and suggest that a consistent focus on adult preventive care can contribute to lower rates of high cost claimants.

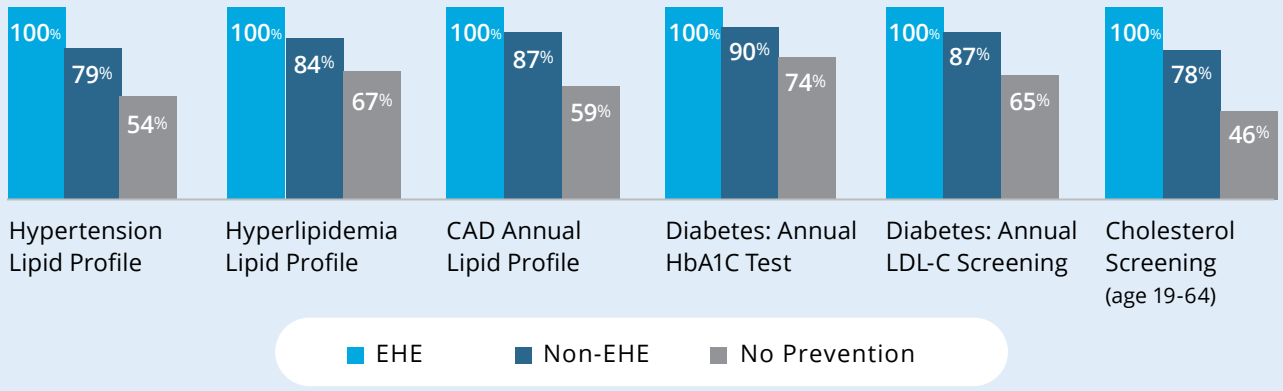
High-Cost Claimant Incidence Differences Relative to All Adults (Table 2)

	Incidence per 1,000 Above/Below Overall Mean	Percentage Difference Relative to Overall Mean
EHE	-3.99	-44%
Non-EHE	+1.27	+14%
No Prevention	+2.03	+23%

Prevention Quality Measures

Several measures were analyzed to assess prevention-related quality measures, some of which are specific to individuals with chronic conditions (hypertension, hyperlipidemia, coronary artery disease and diabetes), and some applicable to general screening for adults. Figure 5 shows testing rates for each cohort during Period 1, which is the baseline year for the preventive exam for the EHE Health and Non-EHE Health cohorts. The consistently higher EHE Health rates reflect the uniform clinical protocol for comprehensive laboratory testing of adults seen at the time of their preventive exam compared to the Non-EHE Health cohort, where traditional primary care practices may differ by treating provider.

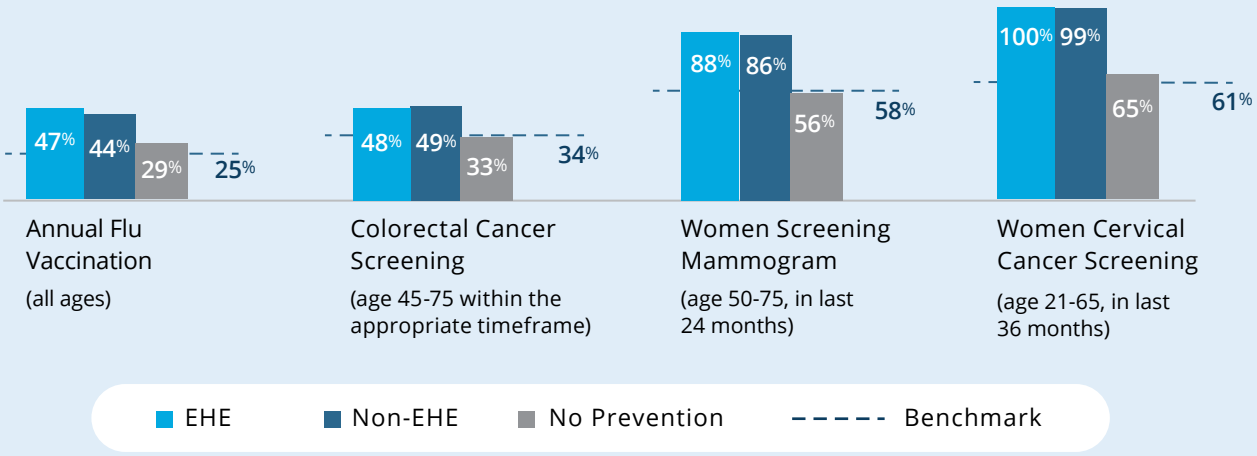
Prevention Testing Rates by Cohort (Figure 5)



Other prevention quality measures as shown in Figure 6 highlight the role preventive care plays in patient compliance for flu vaccination, as well as screening procedures related to colorectal, breast and cervical cancer. The EHE Health cohort performed well above the benchmark for all of these categories.

Figures 5 and 6 further demonstrate the role an adult preventive program like EHE Health can play in elevating overall preventive quality performance, especially when targeting those adults not properly engaged in preventive care, which for these employers represented 40% of their combined adult population. [1]

Selected Vaccination & Cancer Screening Rates by Cohort (Figure 6)

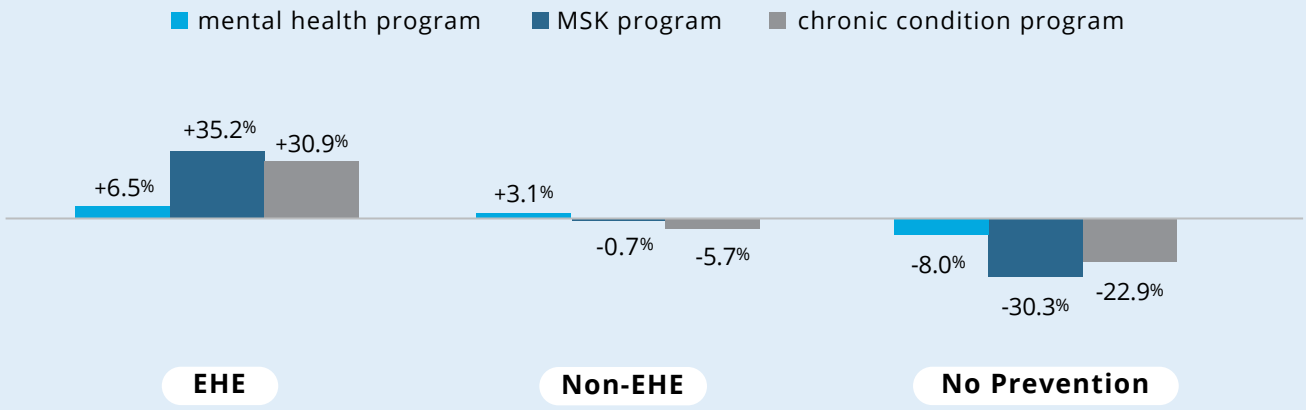


[1] The No Prevention cohort was defined based on their absence of an encounter with a physician for their annual physical exam. Patients in this cohort may have selectively accessed the preventive care services represented in Figures 5 and 6 through other health care encounters not associated with an annual preventive exam.

Employer Well-Being Program Participation

The EHE Health prevention program includes navigation support to employer well-being programs, using findings from the annual preventive exam to highlight opportunities to use employer point solutions to address specific health needs. Participation rates, based on claims utilization associated with three programs for these employers, were compared across the cohorts. The programs examined were: (1) a virtual mental health offering; (2) a musculoskeletal (MSK) program providing individuals access to at-home physical therapy and related services, and; (3) a chronic condition management program targeting hypertension and diabetes. The findings demonstrate greater participation in the EHE Heath cohort compared to All Adults represented in these employer populations, with markedly higher participation for the MSK and chronic condition programs at 35.2% and 30.9%, respectively. Both the EHE Health and Non-EHE Health cohorts drove higher participation in the mental health program.

Selected Well-Being Program Participation Differences Relative to All Adults (Figure 7)



DISCUSSION

The results of this analysis are encouraging and further demonstrate the importance a comprehensive, preventive care program can play for employer sponsored medical programs. The EHE Health program attracted older members with meaningful prevalence of chronic conditions. By incorporating evidence-based preventive care, post-exam health coaching and navigation, and reimbursing its comprehensive services via a bundled payment model, the EHE Health program achieved lower emergency room and inpatient utilization levels and provided the employers predictable preventive primary care costs that contribute to lower healthcare expenditures overall and lower annual inflation.

These beneficial cost and utilization outcomes are simultaneously delivered with a more complete preventive care experience, which was particularly demonstrated for those with chronic conditions where recommended screenings are not routinely performed.

The benefits of increasing participation in this important health care service cannot be underestimated, especially since only one-third of the working age adult population regularly engages in preventive care. Ultimately, this will contribute to better population health that is more cost effective and more valued by patients.

CONCLUSION

The results from this multi-employer study highlight the important role preventive-focused primary care can play in an employer's health care strategy. It can successfully engage individuals with health risks, especially adult males who are significant under-utilizers of preventive care. The ability to deliver lower costs, lower medical trend and better results on key preventive quality measures, as well as increase participation in employer well-being programs shows that the EHE Health preventive-focused primary care program is a value-added partner for both employers and patients.

LIMITATIONS

As discussed earlier under Study Design, random assignment of individuals to each cohort was not possible. Furthermore, the use of claims-based risk adjusters was not deemed credible to adjust for differences beyond age and sex due to the abbreviated approach EHE Health uses for its bundled payment model where fewer medical claims, procedures and/or diagnoses for patients seen are reported. The impact to claims-based risk scoring methods is unknown and further research is warranted in this area.

To illustrate the impact on claims in this analysis, EHE Health was able to compare claims-based disease prevalence to its clinical record for patients seen at least twice over a three-year period and found the following:

- **Hypertension:** The prevalence of hypertension in the EHE Health cohort was understated in the claims data by 30%.
- **Hyperlipidemia:** The prevalence of hyperlipidemia in the EHE Health cohort was understated in the claims data by 35%.
- **Diabetes:** The prevalence of diabetes in the EHE Health cohort was understated by in the claims data by 15%.

EHE Health's findings are not unusual as the actuarial firm, Milliman, has previously highlighted in published work how advanced primary care payment models may result in understated claims-based risk scores in the population.[2]

The reasons for why individuals with these conditions are not represented in the claims data may vary. Some may access medications outside of the medical plan whereas others may pursue lifestyle changes to manage their conditions.

While the use of age and sex adjustment as applied to the findings presented in this report will control for some of the risk variances in the population, this approach is not considered to fully explain the differences in cost and utilization observed.

Other limitations not addressed in the analysis include geographic variations among the cohorts. While EHE Health offers a national network of providers who bring meaningful access these employers' populations (greater than 90% access within 15 miles), geographic differences in costs for the Non-EHE Health and No Prevention cohorts may factor into differences in the financial and utilization results.

Lastly, part of the study period — Period 1, in particular — represents a portion of the COVID pandemic era, which may have impacted how members engaged in healthcare use such as preventive care.

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[2]See the Milliman report prepared for the Society of Actuaries entitled Direct Primary Care: Evaluating a New Model of Delivery and Financing, May 2020.