

Employee Wellness Program Can Identify Those Who Could Benefit from Cholesterol Reduction Efforts

Background

- Elevated levels of low-density lipoprotein cholesterol (LDL-C) cause progression of atherosclerosis and are associated with increased risk of cardiovascular disease (CVD).¹
- Although LDL-C levels are frequently examined in blood tests during a visit to a primary-care physician (PCP), many working adults do not routinely see a PCP.
- The American Heart Association has promoted the adoption of employee wellness programs, because the workplace provides an ideal setting for improving cardiovascular health.²
- **Objective:** This study examined the prevalence of elevated LDL-C among participants in a large employer-sponsored employee wellness program.

Methods

- The study included 25,663 men and women (median age: 46 years, interquartile range: 36 to 55 years, 71% women) who participated in an employee wellness program in 2017. Additionally, all participants were enrolled in a company-sponsored medical plan.
- Prevalent CVD status was retrieved from information provided in medical claims.
- Data from a health risk assessment questionnaire and blood test results were used to calculate 10-year risk of CVD for each participant.
- LDL-C status was classified according to CVD risk and status.
- Primary prevention: Among participants not diagnosed with CVD, elevated LDL-C was defined as >100 mg/dL for those who had a 10-year CVD risk of >7.5% but ≤20%, and >70 mg/dL for those with >20% 10-year CVD risk.
- Secondary prevention: Among participants with established CVD, an elevated LDL-C was defined as >70 mg/dL.

Results

- Of the 25,663 study participants, 2,980 (11.6%; 47% women) had elevated LDL-C:
 - Primary prevention 10-year CVD risk >7.5% to 20% (n=1875): 7.3% of all study participants (median age: 59 years, 44% women).
 - Primary prevention 10-year CVD risk >20% (n=395): 1.5% of all study participants (median age: 63 years, 34% women).
 - Secondary prevention (n=710): 2.7% of all study participants (median age: 56 years, 62% women).
- Of the participants with elevated LDL-C, approximately 45% (n =1343) were young to middle-aged (women ≤60 years; men ≤55 years).

Conclusions

- In this Quest Diagnostics employee wellness program with over 25,000 participants, nearly 12% had elevated LDL-C, of whom 45% were young to middle-aged.
- The results of this study indicate that employee wellness programs can be effective for identifying employees who have elevated LDL-C, and highlight an opportunity for implementing LDL-C reduction efforts.

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References

1. Reklou A, Doumas M, Imprialos K, et al. *Open Cardiovasc Med J.* 2018;12:29-40.
2. Fonarow GC, Calitz C, Arena R, et al. *Circulation.* 2015;131:e480-e497.