

# Testing Precision of Cardiovascular Risk Tool Among Latinos and Asians

The American Heart Association's PREVENT equations accurately predicted cardiovascular event risk among Asian and Latino subgroups.

July 11, 2025 By Laura Schmidt

---

Researchers found that the American Heart Association's (AHA) [PREVENT equations](#), which predict the risk of [cardiovascular](#) events, accurately predicted risk among Latino and Asian subgroups, according to a [Sutter Health news release](#).

Heart disease is the leading cause of death for men, women and people of most racial groups in the United States, including African Americans, Latinos and American Indians, according to the [Centers for Disease Control and Prevention](#). In 2022, 702,880 people died of heart disease.

"The burden of [cardiovascular disease](#) and its risk factors is projected to increase across the U.S. in the coming decades, so the ability to more accurately estimate the disease's risk in all the communities we serve is more critical now than ever," said study author Powell Jose, MD, FACC, a Sutter Medical Group cardiologist, in the release.

Researchers conducted a retrospective cohort study of about 361,780 primary care patients ages 30 to 79 years old from January 2010 to September 2023.

The findings, which were published in [JAMA Cardiology](#), showed that the PREVENT equations accurately predicted cardiovascular disease, atherosclerotic cardiovascular disease (the buildup of plaque in arteries) and [heart failure](#) across broad self-identified Asian and Latino populations, including Mexican and Puerto Rican subgroups.

"In the original validation, PREVENT equations demonstrated good discernment and calibration among racial and ethnic groups, but the model performance among Asian and Hispanic subgroups had not been previously described," said the study's first author, Xiaowei (Sherry) Yan, PhD, a senior scientist at Sutter Health's Center for Health Systems Research. "Our findings showed the

PREVENT models performed well across multiple subgroups, with modest variation across individual Asian and Hispanic populations.”

According to the release:

- Over a mean follow-up of 8.1 years, there were 22,648 (6.3%) cardiovascular disease events among study subjects.
- The predictive accuracy was high for the outcome of total cardiovascular disease among the Asian and Hispanic populations.
- When examined among the subgroups studied, predictive accuracy for total cardiovascular disease remained high.
- There were small differences in the performance of atherosclerotic cardiovascular disease and heart failure PREVENT equations among racial and ethnic groups and subgroups.

“Although best practices for clinical implementation of the PREVENT cardiovascular disease risk prediction models should be further investigated, we believe they are an important step forward for communities that have been historically underrepresented in cardiovascular disease research,” Jose said.

To read more, click [#Cardiovascular](#) or [#Heart](#). There, you’ll see headlines such as “[Midlife Eating Patterns Tied to Health Decades Later](#),” “[Too Much Sitting Linked to Increase Risk for Heart Disease](#)” and “[Social Factors Help Explain Worse Cardiovascular Health Among Adults in Rural Versus Urban Communities](#).”