MODEL OVERVIEW

The Million Hearts Cardiovascular Disease (CVD) Risk Reduction Model (Million Hearts Model) tests whether providing targeted incentives to health care providers to reduce CVD risk lowers the incidence of first-time heart attacks and strokes among Medicare beneficiaries (ages 40-79 who have not had a previous heart attack or stroke). As part of the five-year randomized trial, participating providers calculate their Medicare patients’ risk of having a heart attack or stroke within 10 years1, and receive incentives to reduce the CVD risk of high-risk beneficiaries (defined as those with a 30 percent or higher risk of a CVD event at baseline).

PARTICIPANTS

328 primary care practices, specialty practices, health centers, and hospital outpatient departments throughout the country – half randomly assigned to the intervention group and half to the control group.

The organizations enrolled about 300,000 Medicare beneficiaries in 2017, with 18 percent having a 30 percent or higher predicted risk of having a heart attack or stroke in 10 years. Among these high-risk patients, almost 40 percent of the CVD risk was due to modifiable risk factors, mainly elevated blood pressure and cholesterol.

FINDINGS

QUALITY OF CARDIOVASCULAR CARE

Intervention group providers reported that they were much more likely to calculate cardiovascular risk scores for their Medicare patients than they were prior to the model (and compared to control group providers). Moreover, most (75%) providers said that using risk scores helped them identify their at-risk patients.

Within the first six months of enrollment, intervention group beneficiaries were 17 percent more likely than control group beneficiaries to start or intensify statin or anti-hypertensive therapy to address elevated cholesterol or blood pressure.

1Participants calculate risk scores using the Million Hearts Longitudinal CVD Risk Assessment tool, based on the 2013 American College of Cardiology/American Heart Association (ACC/AHA) calculator.

This document summarizes the evaluation report prepared by an independent contractor. For more information about the Million Hearts Model and to download the evaluation report, visit https://innovation.cms.gov/initiatives/Million-Hearts-CVDRRM/
**Findings at a Glance**

**HEALTH OUTCOMES**

- Among high-risk beneficiaries in the intervention group with follow-up clinical data, CVD risk scores declined by an average of 8 percentage points (or 20 percent) one year after enrollment, driven mainly by decreases in blood pressure.

- There was no difference in the incidence of first-time heart attack and stroke between intervention and control group beneficiaries during the initial 22 month follow-up period.

- The all-cause mortality rate was 7 percent lower among beneficiaries in the intervention group than in the control group.

**UTILIZATION AND COST**

Thus far the Million Hearts Model has not generated any Medicare savings, though savings are hypothesized to occur over the full 5-year test.

The model appears to have increased rates of emergency department (ED) visits and CVD-related hospitalizations. In future analyses, the evaluation will explore whether this difference is due to patients being more aware of worrisome symptoms (prompting visits to the ED) and an increase in CVD-related surgeries.

**KEY TAKEAWAY**

The Million Hearts Model has led providers to more systematically apply the current standard of CVD care, including modest increases in the use of statins and anti-hypertensive medications. Thus far, these changes have not had an impact on the rate of first time heart attack or stroke, or in Medicare spending. However, the model appears to have reduced the risk of all-cause mortality. As this is a prevention model where most of the benefits are realized years after the intervention, net savings were not expected within the first few years of the model. The notable improvements in CVD care processes and beneficiary risk scores are promising and may lead to impacts of the model over a longer time period. Future analyses will assess these outcomes over a longer term, and whether the observed changes in care processes affect heart attacks and strokes, and/or Medicare spending, over a longer period.