





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 attack and stroke among Medicare beneficiaries (ages 40 to 79 who have not had a previous heart attack or stroke). As part of the five-year randomized trial, participating providers use a standardized risk assessment tool to calculate their Medicare patients' risk of having a heart attack or stroke within 10 years. Participants then 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



345 primary care practices, specialty practices, health centers, and hospital outpatient departments throughout the country participated in the model, with half randomly assigned to the intervention group and half to the control group.



Together, the intervention and control organizations enrolled about 392,000 Medicare beneficiaries in 2017 and 2018. CVD risk scores among the intervention beneficiaries were very similar to those among control beneficiaries. Unless otherwise noted, findings in this document are for the combined high- and medium-risk group beneficiaries.

CVD risk group at baseline (predicted probability of having a heart attack or stroke in 10 years)	Enrollment in 2017 and 2018	
	Intervention	Control
High (≥ 30%)	40,996 (18%)	27,792 (17%)
Medium (15–29.9%)	91,554 (39%)	62,317 (39%)
Low (< 15%)	100,231 (43%)	69,622 (44%)
All	232,781	159,731

FINDINGS

Quality of cardiovascular care



The proportion of organizations reporting they calculate risk scores for most of their Medicare beneficiaries remained higher in 2021 (46 percent) than it was before the intervention (14 percent), but below the peak in 2018 (61 percent).

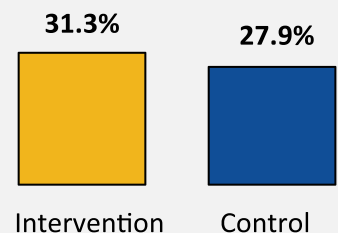


Beneficiaries in the intervention group were more likely to start or intensify statins or antihypertensives within one year of enrollment.



Although intervention organizations said the model became a lower priority during the COVID-19 pandemic, they were able to continue participating, in part through increased use of telehealth and home blood pressure monitoring.

Intervention group beneficiaries were more likely to start or intensify statins or antihypertensives within one year of enrollment

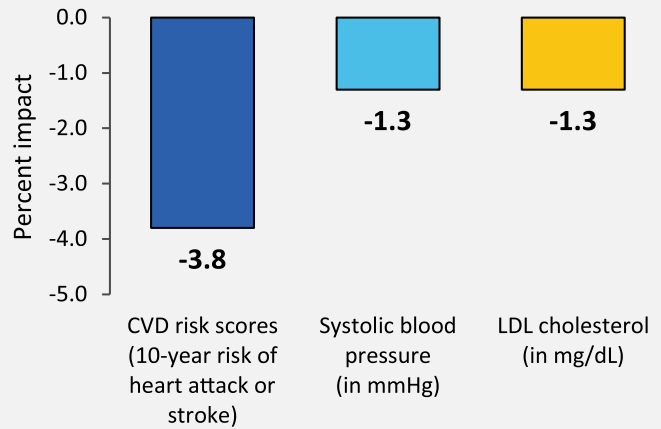


Findings at a Glance

Health outcomes

- The model decreased risk scores for high-risk beneficiaries. Specifically, one year after enrollment, beneficiaries in the intervention group had, on average, a 31.9 percent chance of heart attack or stroke within 10 years, compared to 33.2 percent in the control group.
- Small decreases in systolic blood pressure and low-density lipoprotein (LDL) cholesterol, relative to the control group, drove the impacts on risk scores.
- There was no difference in the rate of first-time heart attack and stroke within three years of enrollment. Among both the intervention and control groups, 4.0 percent of beneficiaries had a first-time heart attack or stroke within three years of enrollment.
- The probability of death was 0.3 percentage points lower in the intervention group than in the control group. Over three years, 6.6 percent of intervention group beneficiaries died compared with 6.9 percent in the control group.

The model decreased CVD risk scores and risk factors one year after enrollment among high-risk patients: intervention-control group percent difference



Medicare spending



The model did not measurably impact Medicare spending. Average Medicare expenditures were very similar for intervention and control group beneficiaries during the entire study period.

Sustaining changes



More than half of intervention group organizations that responded to a 2021 survey made changes to CVD care that they planned to sustain beyond the model. Among those that planned to sustain changes, most planned to sustain changes related to systematically identifying patients at high risk for CVD.

KEY TAKEAWAYS

Through the end of the fourth year, the Million Hearts® Model has improved cardiovascular disease preventive care, as shown by provider's increased use of CVD risk assessment and beneficiaries' increased use of statins and antihypertensive medications. These changes have contributed to reductions in overall predicted risk of having a heart or attack or stroke in 10 years, primarily driven by reductions in blood pressure and LDL cholesterol. Most organizations that continued to participate in the model plan to sustain changes related to using CVD risk assessments. However, over 4 years, the model has not yet reduced the rate of first-time heart attacks or strokes, or Medicare spending.