Heart disease remains one of the leading causes of death in the nation, even with many efforts to prevent, diagnose, and treat cardiovascular conditions. When heart disease and stroke are not fatal, they can result in serious illness, disability, and decreased quality of life. Heart disease and stroke cost the nation $320 billion in healthcare costs and lost economic productivity in 2011, according to the US Department of Health and Human Services.

Heart disease is the #1 cause of death in the United States, killing 647,457 people in 2017.

Source: Centers for Disease Control and Prevention

**Research Addressing Questions That Matter**

PCORI funds comparative clinical effectiveness research (CER) to determine which healthcare options work best for which patients, based on their needs and preferences. CER produces evidence that helps people make better-informed healthcare choices.

**PATIENT**

My doctor is concerned that I’m at risk of having a heart attack or stroke if I can’t get my high blood pressure under control. I’ve heard about a telehealth program that works with patients like me, but how can I know if it will work as well as going into my doctor’s office?

**CLINICIAN**

As a doctor in rural Alabama, I have a number of African-American patients who are struggling to improve their blood pressure. Would partnering with community-based groups in my area increase my patients’ willingness to make the sort of changes in their lives that would lower their blood pressure?

**STUDY SPOTLIGHTS**

**Shared Decision Making Helps with Advanced Heart Failure**

A heart implant called a left ventricular assist device (LVAD) can prolong the lives of people with severe heart failure, but it’s also associated with significant risk for harms, making choosing whether to have one implanted very difficult. Using a shared decision making tool focused on LVAD improved patients’ knowledge about their treatment options and risks, a PCORI-funded study found, and helped them make initial decisions better aligned with their values. More details about this study can be found at www.pcori.org/Allen227.

**Using Questionnaire Improves Decisions about Chest Pain Care**

Although chest pain sends many people to emergency departments, a significant percentage are not having a heart attack or other serious heart problem. Patients who used a decision aid were more knowledgeable about their risk and care options and more involved in decisions about whether to be admitted to the hospital or go home, the Chest Pain Choice Trial found. More details on this study are at www.pcori.org/stories-chest-pain.
Building Capacity for Patient-Centered Research

**PCORnet®, the National Patient-Centered Clinical Research Network,** is a PCORI-funded initiative that enables patient-centered clinical research to be conducted faster, more easily, and more efficiently. It does so by tapping into rich sources of real-word data collected during routine care through electronic health records, patient-reported outcomes, health claims, and other sources and through partnerships among patients, clinicians, researchers, and health systems and plans.

PCORnet is facilitating research on cardiovascular disease. **ADAPTABLE**, the first trial to recruit patients through PCORnet, is comparing the benefits and risks of two commonly prescribed doses of aspirin for patients with heart disease. Another study is using PCORnet to compare ways to better control blood pressure.

As of September 2020, PCORI has awarded **$307 MILLION TO FUND 75** comparative clinical effectiveness research studies related to cardiovascular disease.

### BY THE NUMBER OF PROJECTS

**Areas of Care Addressed**

- **59** Treatment
- **13** Prevention
- **1** Screening
- **1** Diagnosis

**Most Studied Cardiovascular Conditions**

- Cardiovascular Disease: **14**
- Stroke: **14**
- Hypertension: **13**
- Vascular Diseases: **13**
- Congestive Heart Failure: **10**

**Most Studied Populations of Interest**

- Racial/Ethnic Minorities: **56**
- Low Socioeconomic Status: **33**
- Older Adults: **32**
- Individuals with Multiple Chronic Conditions: **29**
- Women: **27**