More than 2 million people are affected by heart attacks and strokes each year. These cardiovascular diseases are the leading causes of preventable death in people under the age of 65.

In addition to causing about one of every three deaths in the United States, cardiovascular diseases also pose a significant financial burden. Treatment of these diseases accounts for about $1 of every $6 spent on health care in this country.

As one of the “stroke belt” states—a term coined to describe the concentration of high stroke mortality rates in the southeastern United States—South Carolina had the highest number of cardiovascular deaths (19,174) in 1995.

To address this issue, the South Carolina Department of Health and Environmental Control partnered with the Outpatient Quality Improvement Network. The network offers free benefits and services to encourage primary care practices to adopt evidence-based medicine for improving cardiovascular health.

Established in 1999, the network is a collaborative of health care providers and primary care physicians who are interested in using data to improve health care quality and outcomes. In addition, the Outpatient Quality Improvement Network maintains a central, searchable database of 2 million patient records obtained from 9,000 physicians and other providers since 1999.

The South Carolina Department of Health and Environmental Control is partnering with the Outpatient Quality Improvement Network to transition South Carolina from being last place in cardiovascular disease to becoming a model of heart and vascular health.

1 in 3 deaths
Cardiovascular disease causes about one of every three deaths in the United States.

Ranked 50th
South Carolina ranked 50th in cardiovascular disease prevention in 1995, with the highest number of cardiovascular deaths in the country.

153% improvement
Hypertension and LDL control improved 153% between 2000 and 2011 among patients with high blood pressure and high cholesterol.

7,750 lives saved
South Carolina saved 7,750 lives by reducing the number of cardiovascular deaths by more than 3% every year from 1995 through 2008.

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Public Health Practice Stories from the Field

What We Did

The public health and primary care partnership focuses on promoting a wide variety of strategies to improve care and health, as well as to minimize cardiovascular disease costs in the state, including

- Promoting a healthy lifestyle through improved nutrition and physical activity
- Encouraging innovation in care delivery
- Emphasizing the ABCS (i.e., aspirin, blood pressure, cholesterol, and smoking)
- Encouraging primary care practices to adopt evidence-based medicine
- Increasing blood pressure and cholesterol control
- Increasing the number of hypertension specialists
- Increasing detection and treatment of tobacco dependence
- Using evidence-based patient assessment and learning tools
- Creating audit and feedback reports
- Identifying barriers to evidence-based practice

What We Accomplished

This partnership made great progress between 2000 and 2011 in improving two important risk-determining factors for cardiovascular health—blood pressure control and LDL control:

- Among patients with high blood pressure, hypertension control increased from 48% to 73%
- Among patients with high cholesterol, LDL control increased from 32% to 53%
- Among patients with both high blood pressure and high cholesterol
  - Hypertension control improved from 48% to 75%
  - LDL control improved from 33% to 55%
  - Hypertension and LDL control improved from 17% to 43%

South Carolina saved 7,750 lives by reducing the number of cardiovascular deaths by more than 3% every year from 1995 through 2008, more than any other state in the stroke belt.

What We Learned

The partnership members learned that trust enables success. Outpatient Quality Improvement Network strives to keep patients’ needs at the forefront and create opportunities for providers to participate in quality improvement and research. A successful partnership can yield long-term improvement in primary care by establishing an innovative, comprehensive, and sustainable model that produces better care and better health at lower cost for patients. This model can be replicated in other states and for any chronic disease.

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