

SOUTH CAROLINA

DEPARTMENT of HEALTH and ENVIRONMENT

CASE STUDY

PROMOTING BRAIN HEALTH AMONG AT-RISK POPULATIONS

IMPLEMENTATION of the HEALTHY BRAIN INITIATIVE ROAD MAP

PROBLEM

South Carolina has one of the fastest-growing populations of older adults in the country and is in the “Stroke Belt,” a set of southeastern states with a higher burden of stroke and cardiovascular disease than other US regions. Hypertension, diabetes, mid-life obesity, and smoking are among the cardiovascular risks that studies have found to be associated with increased risk of cognitive decline and possibly dementia. Although many mid-life and older adults are concerned about brain health, they often lack awareness of strategies to best preserve cognitive functioning and reduce risk for impairment.

SOLUTION

The South Carolina Department of Health and Environmental Control (SC DHEC) partnered with the Alzheimer’s Association South Carolina Chapter, the American Heart Association, and Eat Smart Move More South Carolina to raise awareness about Alzheimer’s disease and brain health, which is strategic action E-04 of the *Healthy Brain Initiative Public Health Road Map*. The multi-layered campaign — Take Brain Health to Heart — was specifically designed to reach people in rural areas and racial/ethnic minority populations that have a higher prevalence of the cardiovascular risk factors that correlate with increased risk of cognitive decline and possibly dementia.

Campaign elements included a new webpage on the agency’s website, health education materials,

social media messages, three radio public service announcements (PSAs), and an online pledge in which residents commit to keeping their body, heart, and brain healthy. The messaging was designed to mobilize South Carolinians to protect their brain health and reduce the risk of cognitive impairment by being more active, eating better, quitting smoking, controlling hypertension and diabetes, avoiding injuries to the brain, and maintaining a healthy weight. Benedict University (a Historically Black College and University) and the University of South Carolina Prevention Research Center also helped promote the campaign.

INITIAL OUTCOMES

Over the course of a seven-week health-campaign period, the department-led collaboration achieved the following:

- Nearly 1,500 PSAs were aired on four radio stations, reaching over 2.7 million people from diverse demographic backgrounds (e.g., rural and urban, income levels, educational attainment, and ages). The PSAs referred listeners to the SC DHEC brain health webpage and the agency’s smoking quit-line.
- As an incentive for its Take Brain Health to Heart campaign, SC DHEC instituted a monthly giveaway for a fitness tracker device. The SC DHEC website advertised the monthly giveaway, and individuals entered the drawing by pledging to engage in seven behaviors that promote brain health, such as exercising, avoiding all tobacco use, keeping

blood pressure under control, and using a seat belt. Over 200 people took the pledge over four months.

- As part of the Take Brain Health to Heart campaign, SC DHEC developed educational materials focused on cognitive decline risk factors, including social media messages, fact sheets, brochures and information displays. Campaign messages were synced with existing SC DHEC messages regarding exercise, smoking cessation, hypertension, diabetes, obesity and traumatic brain injury. Altogether, about 6,500 people were exposed to social media messaging and over 31,000 were exposed to print media items.

SC DHEC also saw the importance of educating the agency's public health professionals regarding the Take Brain Health to Heart campaign and offered four dementia-related workshops to employees during June 2017. This educational series relates to the strategic action W-01, developing core knowledge about dementia in the workforce, in the *Healthy Brain Initiative Public Health Road Map*. The workshops included:

1. The Basics and Warning Signs of Memory Loss, Dementia, & Alzheimer's Disease;
2. Healthy Living for Your Brain and Body;
3. Effective Communication and Understanding Difficult Behaviors; and
4. Approaching Alzheimer's Disease - First Responder Training (delivered to emergency medical service providers and nursing home inspectors).

SC DHEC also included a breakout session, *Protecting Brain Health: Chronic Disease Prevention and Risk Management in Alzheimer's and Other Dementias*, during the 15th Annual Chronic Disease Prevention Symposium, which provided ongoing education for medical providers and other health care professionals in the state. This is strategic action W-02 of the *Healthy Brain Initiative Public Health Road Map*.

The professionals who participated in SC DHEC's educational sessions now have a basic understanding of modifiable risk factors for cognitive decline and possibly dementia so they can integrate information about brain health in communications with patients, clients, and the general public. Information from these professionals reinforces the SC DHEC message of taking action to protect cognition.

To inform next steps with the initiative, the department analyzed data from the South Carolina Behavioral Risk Factor Surveillance System (BRFSS) regarding subjective cognitive decline. One significant finding was a strong correlation between subjective cognitive decline and smoking status. SC DHEC continues to work with the Alzheimer's Association, South Carolina Chapter to identify appropriate targeted messaging for smokers.

This brief is supported by Cooperative Agreement #5 NU58DP006115, funded by the Centers for Disease Control and Prevention. The findings and conclusions in this brief are those of the Alzheimer's Association and do not necessarily represent the official position of the Centers for Disease Control and Prevention.