



## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:  
PP180037

Project Title:  
Advancing an Established Colorectal Cancer Prevention Program for Rural and Underserved Texans through A&M's Family Medicine Residency

Award Mechanism:  
Evidence-Based Prevention Programs and Services

Principal Investigator:  
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Entity:  
Texas A&M University System Health Science Center

### Lay Summary:

Need: Colorectal cancer (CRC) is the 2nd leading cause of cancer-related deaths in the U.S. and TX (ACS, 2017). Rural counties often see higher incidence and mortality from CRC compared to urban (Zhand et al., 2017). CRC incidence and mortality also reflect racial disparities (CDC, 2013). In TX, black males have nearly 14% higher incidence and 10.8% higher mortality compared to white males (Texas Cancer Registry, 2017). TX ranks 41st in CRC screening compared to other states (ACS, 2017), and Hispanics are less likely to have screening compared to non-Hispanics (Siegel et al., 2014).

A 21-county area of TX (15 rural), including the Greater Brazos Valley (Region 1) and several counties inland of the Coastal Bend (Region 2), have demonstrated high rates of CRC (TX Cancer Registry, 2017). More than ¼ of the population in these counties is age 50-74 yrs, an age appropriate for average-risk CRC screening. Eleven of 21 counties have a greater rate of individuals living below poverty level compared to the TX average of 15.9%. Region 1 includes six counties where >20% of the population is Black, while Region 2 includes three counties with a high rate of Hispanics (34.6, 35.8 and 53.3%). These two factors, (i.e., rurality, race/ethnicity) have been associated with suboptimal screening rates (Ojinnaka, 2015) and may contribute to higher CRC mortality seen in 13 of these counties, compared to the TX average.

In 2011, the TX A&M Health Science Center (TAMHSC) received CPRIT award PP110176 to provide CRC screening in the Brazos Valley, while training family practice resident physicians in colonoscopy. Through the grant, TAMHSC established the Cancer Screening, Training, Education and Prevention Program (TX C-STEP), using a community health worker (CHW) model to enhance the ability of the TX A&M Physicians Family Medicine Center (TAMPFMC) and residency program to provide accessible CRC screenings to uninsured/underinsured. In 2014, CPRIT grant PP150025 allowed TX C-STEP to expand its service area from seven to 17 counties. Combined, these grants have provided 1,992 colonoscopies to 1,914 patients (1,500 at no cost to patient). Blacks and Hispanics received >62% of C-STEP colonoscopies.

Goals: Congruent with CPRIT RFA P-18.1-EBP, the overall goal of this proposed project is to provide CRC prevention education, screenings and patient navigation across the continuum of care, to residents of 21 TX counties, including 15 rural. Specific goals:

- Increase by up to 1,235 the number of low-income, underserved and rural Texans who receive CRC screening via colonoscopy (740) or fecal immunochemical test (FIT, 495 complete);
- Improve access to culturally appropriate CRC prevention education and navigation, by at least 54,505 people/professionals, including use of CHWs;
- Increase by 45 the pool of family medicine physicians receiving colonoscopy training.

Strategy/Methods: TAMPFMC in Bryan, TX, having taught colonoscopy as part of its residency curriculum since 2005, will be the primary grantee for colonoscopy, as well as FIT dissemination (to Region 1 persons medically disqualified from clinic-based colonoscopy or, in both Regions, persons resistant to colonoscopy). Two other providers will collaborate with TAMPFMC to ensure success of the project. Cuero Regional Hospital (CRH), site of a new rural rotation for TX A&M resident physicians will provide CRC screenings (colonoscopy & FIT) to four Region 2 counties—DeWitt, Goliad, Karnes, Lavaca. All four counties are served by only 0-1 CPRIT CRC prevention projects and three are rural counties with CRC incidence 39%-60% higher than the TX average. Limestone Medical Center (LMC), in Region 1's northern service area, will provide CRC screenings in Falls, Limestone and Freestone, and is also accessible to Robertson, Leon and Houston Counties. C-STEP staff and CHWs have an extensive history of community outreach and education in Region 1 counties—having attended special events, identified community champions, and partnered with social service agencies and churches in all of the Region 1 counties previously. Each CPRIT-trained, state-certified C-STEP CHW, will be assigned to several counties, to assist patients to overcome barriers such as fear, medical mistrust, or disinterest in CRC screening. In addition, TAMPFMC employs clinic-based CHWs for patient scheduling, and one-on-one education and navigation, particularly for patients with positive findings. A masters-level Graduate Assistant will assist C-STEP staff and healthcare providers with outreach and referrals for the new Region 2 service area.

Significance and Impact: CRC is a significant public health problem in TX, especially in areas with rural and uninsured populations. Funding for this project will allow TX A&M's CRC prevention program to serve 21 counties with CRC screenings, education and navigation to reduce barriers, and increased numbers of family medicine physicians trained in colonoscopy.