



## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:  
PP160075

Project Title:  
Implementation an Evidence-Based Colorectal Cancer Screening Outreach Program among Socioeconomically Disadvantaged Patients in a Safety Net Health System

Award Mechanism:  
Evidence-Based Prevention Programs and Services

Principal Investigator:  
Singal, Amit

Entity:  
The University of Texas Southwestern Medical Center

### Lay Summary:

Need: Colorectal cancer (CRC) is a significant health problem in Dallas County (HSR 2/3), particularly among the underserved, socioeconomically disadvantaged, and racially diverse (50% Hispanic and >30% Black) patient population followed at Parkland Health and Hospital System, the sole safety net health system for Dallas County. Among >18,000 Parkland patients ages 50-64 years who are actively engaged in primary care, only 30% are up-to-date with CRC screening. These rates are half the national average (60%) and fall short of the Healthy People 2020 goal of 70%. Further, only half (50%) of those with abnormal fecal immunochemical test (FIT) undergo follow-up colonoscopy within 6 months. These screening process failures result in nearly two-thirds (62%) of CRC at Parkland being detected at late stages, when treatment options are limited and survival is poor.

Through an NCI-funded U54 CRC Screening Center grant, we demonstrated an outreach intervention of mailing home FIT kits to patients who were not screen up-to-date doubled screening rates versus usual care (59% vs. 30%,  $p < 0.001$ ). In our CPRIT proposal, we will "scale up" this proven intervention and implement it within the entire Parkland patient population of uninsured individuals ages 50-64 years who are not screen up-to-date. In doing so, this proven-effective program will bring a large group of vulnerable adults up to the national average and closer to the Healthy People 2020 goal of 70% screening.

Strategy: Our CPRIT screening program will be modeled after our prior successful U54 CRC Screening Center grant and Community Services Task Force recommendations. We propose to conduct a CRC screening outreach program among < 18,000 screen-eligible patients, ages 50-64 years, who receive primary care through Parkland. Our intervention will include: a) low-literacy educational letters, b) mailed screening outreach invitations delivered annually, c) a one-sample home FIT kit and return mailer with prepaid postage, d) telephone reminder calls including one-on-one education, and e) centralized patient navigation for follow-up of abnormal FIT results. Because our data show some people invited for FIT prefer to instead complete colonoscopy, we will also build in a pragmatic "Screening Choice Trial" that will randomly select 2000 patients to receive mailed invites that provide a choice of completing a home FIT kit or scheduling a colonoscopy to evaluate if having a choice of test further increases screening success. We will use a

centralized database to track screening results and a patient navigation program to promote completion of CRC screening and follow-up of abnormal FIT results.

Goals: We will conduct an evidence-based CRC prevention program among > 18,000 uninsured 50-64 year old persons served by Parkland with the following goals:

1. Improve rates of CRC screening, timely follow-up of abnormal FIT results, and timely cancer treatment evaluation among a racially and socioeconomically diverse cohort of patients at Parkland. We will deliver mailed home FIT kit invitations to complete CRC screening among eligible patients with centralized processes to promote screening completion, follow-up for those with abnormal FIT, and treatment for those diagnosed with CRC.
2. Conduct a "Choice Trial" to compare an outreach strategy offering mailed home FIT kits (n=16,000) to a strategy of inviting patients to complete their choice of test (home FIT kit or scheduled colonoscopy) (n=2,000) to increase CRC screening completion.
3. Rigorously evaluate outcomes of the CRC screening outreach program (Aim 1) and Choice Trial (Aim 2) using specific and measurable measures based on the RE-AIM conceptual framework. We will evaluate process measures to assess CRC screening process completion, outcome measures including early tumor detection, and patient-reported outcomes including satisfaction with the screening program.

Innovation: Our CPRIT proposal will implement a sustainable system-wide infrastructure for CRC screening among a racially diverse and socioeconomically disadvantaged patient population in Dallas County – subgroups at highest risk for CRC mortality but lowest rates of CRC screening. We will work with Parkland leadership to plan how our population-based CRC screening program can be most effectively maintained after CPRIT funding ends. Our proposal will also determine if offering a choice of FIT and colonoscopy enhances the effectiveness of mailed outreach to increase CRC screening participation, further advancing early detection knowledge.

Significance: Locally, we will deliver potentially life-saving screening invitations to > 18,000 patients and create a robust, sustainable CRC screening program poised to improve CRC outcomes for uninsured persons in Dallas County, TX. Thereby, our program can serve as a proven, replicable model for improving CRC screening processes and outcomes among underserved populations in health systems throughout Texas.