



## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:  
PP150079

Project Title:  
STOP HCC –Evidence-Based Hepatocellular Cancer Prevention Targeting  
Hepatitis C Virus Infection

Award Mechanism:  
Evidence-Based Prevention Programs and Services

Principal Investigator:  
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Entity:  
The University of Texas Health Science Center at San Antonio

### Lay Summary:

Need: Hepatocellular carcinoma (HCC), the 9th leading cause of cancer-related death in the United States (U.S.), is one of the few cancers with an increasing incidence and mortality rate. Texas (TX) has the 2nd highest HCC incidence rate in the U.S. and is the fastest growing cancer in TX. Thus, there is a great need for evidence-based interventions to reduce HCC burden in the U.S., particularly TX. Hepatitis C virus (HCV) is the dominant risk factor for HCC in the U.S. Citing strong evidence, in 2013 the U.S. Preventive Services Task Force endorsed screening all baby boomers (born 1945-65) for HCV infection and linking HCV-infected (HCV+) patients to treatment to prevent cirrhosis, HCC, and other complications. Patients with cirrhosis have a 2-6% annual risk of HCC that can be reduced by 75% when HCV is effectively treated. Despite new, effective, and safe treatments for HCV, 10% of at-risk patients are being screened for HCV and/or treated. Based on discussions with CPRIT program staff, we have been encouraged to write this application to advance HCC prevention with an evidence-based HCV screening and treatment program. Overall Project Strategy: Our program to STOP (Screen, Treat, or Prevent) HCC will reduce HCC incidence and mortality by implementing an evidence-based HCV screening and treatment program for low income populations in 10 TX counties coupled with a continuum of care for HCC prevention and control. Our program incorporates best practices for HCV and HCC prevention and care by drawing upon the talents of a multidisciplinary team from two leading TX academic centers in partnership with their cancer centers and 2 TX Area Health Education Centers. STOP HCC will be implemented in 12 primary care clinics in a large safety-net health system in Dallas County and 10 primary care clinics in 9 South Texas counties treating mostly Hispanics. STOP HCC uses features of the patient-centered medical home model: 1) an electronic medical record infrastructure for HCV screening and HCV/HCC management; 2) culturally appropriate patient counseling and education about HCV/HCC and self-management; 3) team-based care with case management; 4) specialty collaborative care for chronic HCV+ treatment (primary HCC prevention); and 5) referral to cancer centers for evaluation and treatment of HCC (secondary prevention). STOP HCC is designed to be replicable and sustainable in diverse primary care settings including integrated health systems, federally qualified health centers (FQHCs), residency training programs, and solo practices. Specific Goals: To address limited awareness about HCV infection and HCC, STOP HCC will offer in-person educational programs in 10 counties for 1000 clinicians, administrators, and members of the general public and web-based education for 5,000.

In 22 primary care practices, 20,000 baby boomers will be screened for HCV, of whom an estimated 600 (3%) will be anti-HCV+, 300 will have chronic HCV+, and 15-20 HCC. HCV+ persons will be educated about HCV and HCC to promote acceptance and compliance with anti-HCV treatment which can clear HCV infection in 80-90% of patients and will be directed by HCV/HCC specialists on our team. Over 200 patients will be treated for HCV through STOP HCC. Patients found to have HCC will be linked to the extensive treatment resources of our affiliated cancer centers. Outcomes will be measured using the RE-AIM model. We will track numbers of patients who are: screened, HCV+, counseled, initiating anti-HCV therapy, achieve a sustained viral response, and receiving HCC-directed therapy. Innovation: New national guidelines for HCV screening of baby boomers have had limited adoption in TX according to the TX Dept. of State Health Services (DSHS). STOP HCC is the first organized effort to implement evidence-based HCV screening and treatment to reduce HCC incidence and burden among underserved TX residents. To optimize feasibility and sustainability, we capitalize on innovations from our recently completed, successful inpatient HCV screening program. Significance and Impact: STOP HCC will provide an efficient, scalable HCC prevention model for diverse primary care practices in TX. This program will test 20,000 persons for HCV and create a HCC cancer control continuum for low income, largely minority TX residents, a group that is disproportionately affected by HCC but often underserved. We will partner with TX DSHS to offer in-person or web-based education to 6,000 clinicians and communities about the threat of HCV and HCC. These programs are designed to mobilize the community to adopt ongoing HCV screening and treatment efforts for persons at high risk for HCC. We will offer compelling evidence to policymakers to support programs that address HCV screening and treatment for groups at greater risk of HCC in TX. This project will serve as a basis for a broader initiative to reduce the threat of HCC in TX.