



CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
PP170121

Project Title:
Evidence-Based Hepatocellular Cancer Prevention through Targeted
Hepatitis C Screening and Navigation

Award Mechanism:
Evidence-Based Prevention Programs and Services

Principal Investigator:
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Entity:
The University of Texas Southwestern Medical Center

Lay Summary:

Need: The most common primary liver cancer is hepatocellular carcinoma (HCC). Estimates of highest incidence in the US are known to be in areas with elevated prevalence for hepatitis C virus (HCV) infection. Therefore, early detection and treatment of HCV will support HCC prevention for which hepatitis C infection is the main risk factor. Texas maintains the 2nd highest incidence rate for HCC in the nation at 9.1/100,000 persons and HCC is the fastest growing cancer in the state. Of the 3,031 cases that occurred in Texas in 2015, nearly 8% will occur in Tarrant County and surrounding areas—the project service area. Barriers to addressing HCV and associated HCC include knowledge gaps at both patient and provider levels regarding chronic HCV and HCC in at-risk populations, as well as an insufficient understanding of this public-health problem, resulting in inadequate public resources allocated to prevention, control, and surveillance programming. Using a multidisciplinary team, program implementation will build on HCV and HCC programming currently being conducted. It will address these barriers to HCV screening and treatment for at-risk persons who were born from 1945 to 1965, i.e., baby boomers, and are followed at safety-net health systems.

Overall Project Strategy: This project leverages current HCC prevention experiences at Parkland Health and Hospital System and implements an evidence-based program for HCV screening that will help reduce HCC incidence. The program team will conduct an evidence-based HCV-HCC prevention program among patients seen through the JPS Health System, a safety-net health system serving Tarrant County. Similarly, the program will leverage screening opportunities through existing early detection and outreach programming at Moncrief Cancer Institute to implement a mobile HCV screening program in rural and medically underserved populations across a nine county service area. Specifically, the project screens for HCV using an electronic medical record (EMR)-based best practice alert (BPA), supported by a multi-disciplinary clinic involving hepatology, infectious disease, pharmacy, and patient navigation to treat newly diagnosed HCV patients. Linkage to care, including HCV evaluation and treatment will be navigated by care coordinators and delivered by physicians in each of these settings.

Specific Goals: 1. Promote HCV control and management to reduce the risk for hepatocellular carcinoma for patients born between 1945-1965, using an electronic medical record based-best practice advisory (BPA) at John Peter Smith Hospital (JPS), the safety net hospital for Tarrant county. 2. Implement a mobile HCV screening program for individuals born between 1945-1965 who reside within a geographically remote

service area comprised of 9 North Texas counties using the Moncrief Cancer Institute's mobile health unit. 3. Provide navigation support for HCV-positive patients to ensure access to care through JPS and other partnering community healthcare providers, up to and including treatment in collaboration with pharmaceutical patient assistance programs.

The program team will implement HCV screening within the 12 community and hospital based primary care clinics at JPS. JPS provides approximately 457,000 encounters annually, of which, more than 15, 000 are baby boomers. The proportion of HCV screen-eligible population who are medically underserved is greater than 390,000 for the entire region. As a result, the program aims to screen more than 20,000 patients over the course of the study period through combined efforts at JPS and community outreach programming. HCV antibody positivity rates are expected to be between 5-10%.

Innovation: This project leverages current HCC prevention experiences at Parkland Health and Hospital System and implements an evidence-based program, integrating EMRs into HCV screening. Patients identified with HCV are linked and referred to care and treatment to maximize HCC prevention results. In addition, community health providers within the surrounding area are educated regarding HCV risk and HCC prevention. Most primary care practices do not currently have the EMR infrastructure or team-based care needed to screen and counsel the target population.

Significance and Impact: Although HCV treatment is effective over 90% of the time and currently is the most effective strategy for HCC prevention, over 50% of HCV-infected persons are unaware of their viral status. Under-recognition and under-treatment of HCV infection is particularly prevalent in racially diverse and socioeconomically disadvantaged populations served by safety-net health systems. The program team is experienced and well positioned to address these barriers and to implement a proven, evidence-based approach to HCV screening and treatment. The proposed program will increase HCV awareness, HCV screening and treatment in Tarrant and its eight surrounding counties that currently lack organized HCV screening programs.