CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
PP110220

Project Title:
Cancer Genetics Services for Rural and Underserved Populations in Texas

Award Mechanism:
Evidence-Based Prevention Programs and Services

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

Lay Summary:

Some cancers run in families. Genetic testing identifies individuals from these families who are at very high risk for cancer (58 – 80% chance of getting cancer). There are many things these people can do to make sure cancers are diagnosed early or prevented all together. Because Cancer Genetics involves fairly new and sometimes costly technologies that are not well understood by many primary care providers it is mostly affluent, well-educated white people who are deriving the greatest benefits from it. The uninsured and underinsured, African-Americans, Hispanics, and those who live in rural small towns are largely left out and never have the opportunity to discover that they are at high risk for cancer and, consequently, never have the opportunity to act to reduce this risk. This project organizes nine health care facilities in Health Service Region-03 that already target underserved populations to begin systematically identifying individuals who may carry these damaged genes, to provide genetic counseling and testing services, and to help the “at risk” individuals get the cancer screening and risk-reducing interventions they need. We are focusing on the two most common genetic syndromes, Hereditary Breast-Ovarian and Lynch syndrome, which are associated with very high risk for breast, ovarian, colorectal, or uterine cancer. In the first year, we will screen 45,800 women having mammograms using a simple cancer family history screening tool developed and validated by the Centers for Disease Control. We will also screen 408 newly diagnosed colorectal and uterine cancers using an antibody test to see if they have the features of Lynch Syndrome cancers. We will establish patient navigation systems to facilitate genetic counseling and testing in these individuals, and help them get the appropriate cancer risk screening and the indicated risk-reducing interventions. We will expand our efforts to help the family members of new mutation carriers as well. One very innovative aspect of this project is the optimization of our web-based counseling environment, CancerGene Connect to better serves Spanish language and minority patients. This system will help us to establish remote genetic counseling capabilities in Western rural counties that currently do not have any cancer genetics services. We have developed sophisticated models for measuring the impact of this project on cancer rates. It is clear that the greatest impact is realized by identifying more mutation carriers and helping these individuals to get access to risk-reducing interventions. The components of this project are imminently portable to significantly reduce cancer burden for the estimated 69,000 Breast-Ovarian and Lynch syndrome patients in the state of Texas, regardless of insurance status, ethnicity, race, or geographic location.