CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
PP160011

Project Title:
GRACIAS Texas: Genetic Risk Assessment for Cancer in All South Texas

Award Mechanism:
Competitive Continuation/Expansion - Evidence-Based Cancer Prevention Services

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

Lay Summary:

Need: It has been well recognized for many decades that a family history of cancer increases one's risk of cancer. In the 1990's it became clear that in many families with multiple members with breast or colon cancer, risk could be defined by the presence of an inherited mutation in a cancer predisposition gene. The subsequent development of a large body of knowledge in the area of cancer risk reduction has provided much evidence-based rationale for identifying affected individuals carrying mutations in these genes. Texas has over 100 genetic counselors, 30% of which provide cancer genetic counseling. None, however, are in Texas in regions south of San Antonio. Our CPRIT prevention initiative fills an important gap in cancer service provision in a population which is defined as largely minority and underinsured and with high poverty, low literacy, and marked deficiencies in access to healthcare.

Overall Project Strategy: We propose to continue and expand to cover a broader area in southernmost region of Texas, including 23 additional underserved counties. We will provide to these additional counties the cancer genetic services we have provided extensively in our initial funded project, thus reaching underserved and indigent patients throughout South Texas where previously no cancer genetic counseling services existed. We will replicate the infrastructure we established over the past 3 years in additional underserved areas along the Texas southern and southwestern border and southeast coastal regions. We will establish two additional videoteleconferencing (vtel) sites along the border that can provide access to cancer genetic counseling. We will also provide genetic counseling by telephone in selected individuals from rural areas. Patients deemed to be at high-risk of carrying a genetic predisposition will be provided with opportunity for genetic testing. Members of families with a significant family history of cancer will be offered cancer screening services. We will train mammography technicians in family history taking in multiple additional centers. We will train the next generation of physician providers in South Texas by partnering with a new medical school in the Rio Grande Valley.

Specific Goals: 1) We will educate the next generation of primary care providers in the area of cancer risk assessment and counseling by partnering with clinics within residency programs in a developing medical school in the Rio Grande Valley. 2) We will establish strategies to efficiently identify families who need referral to formal genetic risk

assessment by analyzing family history on an on-going basis in the primary care setting and in mammography screening centers using a simple screening tool to identify patients with breast or colon cancer who are at high risk of carrying a heritable mutation. 3) We will educate mammography technicians in the importance of family history in assessing breast cancer risk. Such education will not only help identify high-risk individuals but will serve to sustain the process of identifying women at highest risk of breast cancer. 4) We will provide formal cancer genetic risk assessment, counseling and genetic testing services to high risk-families in underserved areas of South Texas, including underserved in San Antonio area, and along the Texas southern border and coastal regions by establishing additional strategic sites in Nueces, Maverick, and Val Verde counties for videoconferencing with patients in these and surrounding counties, thus covering a large area of the Texas border and coastal regions. 5) We will provide cancer screening services to individuals at highest risk of cancer because of either a strong family history of cancer or a documented genetic mutation in a cancer predisposition gene. 6) We will extend our network of providers in South Texas with expertise and ability to provide services to individuals at high-risk of cancer.

Significance and Impact: South Texas is particularly lacking in cancer genetic counseling services. We will fill this gap by providing cancer genetic counseling on a continuing daily basis through videoconferencing and in-person clinic sessions at multiple sites in South Texas including San Antonio and the border and southern coastal regions. This will positively impact the ability to identify individuals at highest risk of cancer and enhance the ability to effectively recommend evidence-based interventions to reduce cancer incidence and mortality. The population to be served is characterized by a high degree of poverty, low literacy, and high uninsured status. We will not only provide testing and screening services, but also education to empower individuals to advocate for their cancer prevention health care needs. We will work to sustain the identification and care of the individual at genetically high-risk of cancer by education of the medical community at multiple levels.