CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
PP170015

Project Title:
Disseminating Evidence-Based Cancer Genomics Training to Community Health Workers

Award Mechanism:
Dissemination of CPRIT-Funded Cancer Control Interventions

Principal Investigator:
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Entity:
Texas A&M University

Lay Summary:

Need: Family health history (FHH)-based cancer genomics services hold substantial promise in reducing cancer morbidity and mortality through personalized prevention approaches. These approaches require primary care providers collect FHH, conduct FHH assessments, make FHH-based lifestyle and cancer screening recommendations, and refer high-risk clients to clinical genetic services for cancer genetic evaluation/testing. Clients will subsequently adopt healthier behaviors, undergo cancer screenings, and receive early intervention/treatment (if needed). Due to the short primary care appointments and lay people's limited genomic literacy, however, clinical delivery of FHH-based cancer genomics services is not ideal. To fill this gap, we developed, implemented, and evaluated the first theory-grounded, evidence-based cancer genomics training program for Texas health educators (HEs) in two CPRIT-award projects (PP100214 and PP140210). Our data indicated HEs successfully established their cancer genomic competencies and increased the practice of FHH-based cancer genomics services after training. Clients served by HEs enhanced FHH collection, cancer screening behaviors, and healthier lifestyle adoptions. The number of high-risk clients undergoing genetic evaluation/testing increased. Building on these successes, along with serving more lay and/or underserved communities, we propose to adapt and disseminate the evidence-based cancer genomics training program to Texas community health workers (CHWs). CHWs are lay health educators, serving as the bridge between communities and healthcare services. Because CHWs often work with and/or are supervised by HEs to provide community education, services, and outreach, training CHWs in cancer genomics is necessary.

Overall Project Strategy: This resubmitted multidisciplinary project with experienced CPRIT-funded investigators, leaders of CHW training centers, and genetic specialists will include four phases. In Phase I, we will revise, adapt, and pilot test the cancer genomics training program materials developed in previous CPRIT awards to be tailored to CHWs' professional competencies and work settings. As Texas has a large Latino population and many CHWs speak Spanish, program materials will be translated into Spanish. A genetic services resource and navigation guide will be developed. In Phase II, we will deliver nine training workshops to 300 CHWs in urban and rural areas of Texas. The impact of the training upon participants' behaviors (i.e., FHH collection, FHH assessments, cancer genetic evaluation/testing education, and FHH-based lifestyle and cancer screenings and

genetic evaluation/testing recommendations) and theoretical mediators shaping such behaviors (i.e., knowledge, attitudes, self-efficacy, and intention) will be evaluated by pre-test, immediate-post-test, and three-month follow-up surveys. Additionally, clients receiving cancer genomics services/education from trained CHWs will be asked to complete the baseline and three-month follow-up surveys to examine improvements in lifestyle, cancer screening behavior, and usage of clinical cancer genetic services. The training materials will be finalized according to the evaluation data and be accessible on the cancer genomics training dissemination website developed in Phase III. This bilingual website will also include a dissemination toolkit to guide CHW training centers and programs employing CHWs with the best practices to train CHWs in cancer genomics, and a virtual community to engage CHWs in discussing challenges in their practices with colleagues and our research team. In Phase IV, we will promote the website via various active and passive dissemination techniques to implement and diffuse the cancer genomics training to all Texas CHWs.

Specific Goals: Goal 1: Revise, adapt, translate, and pilot test the cancer genomics training program materials developed in previous CPRIT awards for CHWs. Goal 2: Implement, evaluate, and finalize the cancer genomics training materials developed in Goal 1 with 300 CHWs. Goal 3: Develop a cancer genomics training dissemination website. Goal 4: Disseminate and promote the website developed in Goal 3 to individual CHWs, CHW programs, and CHW training centers.

Innovation: This is the first theory- and evidence-based cancer genomics training program for CHWs. The training is delivered via workshops and our website, which can be delivered to all CHWs across Texas. The dissemination website hosts an online community, allowing CHWs to interact with others regarding their cancer genomics practices. Active and passive dissemination components enhance the innovative nature.

Significance and Impact: This project will lead to the potential long-term impact on cancer morbidity and mortality by promoting CHWs' delivery of personalized cancer genomics education/services and by facilitating lifestyle changes, cancer screenings, and genetic testing (if needed) among clients served by CHWs.