



CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
PP180080

Project Title:
HPV Vaccination in a Pediatric Minority-Based Community Oncology
Network

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: Human papillomavirus (HPV) is known to cause most cervical, anal, and oropharyngeal cancers, and a large proportion of vaginal, vulvar, and penile malignancies. Every year nearly 31,000 new cases of HPV-related cancers are diagnosed in the United States alone. This incidence persists nearly a decade following the launch of the HPV vaccine in 2006, and in fact is rising with continued poor HPV vaccine uptake. In 2016, only 43% of females and 32% of males completed the 3-dose series and rates in Texas are even lower where HPV-related malignancies are highest among the state's predominately Hispanic population. Thus, HPV vaccine initiatives targeting in Texas are critical, beginning with those at greatest risk.

Childhood cancer survivors (CCS) represent a particularly high-risk population. Compared to the U.S. general population, CCS experience significantly higher rates of HPV-related malignancies (40% more in females and 150% more in males). Despite these increased risks, CCS have very low HPV vaccination rates. Many CCS do not transition back to a general pediatrician for preventive care, instead seeing only their oncologist. Because oncologists do not routinely provide vaccines for their patients, CCS may not be offered the HPV vaccine despite their increased risk for future HPV-related malignancies. A review of CCS treated at the University of Texas Health Science Center San Antonio (UTHSCSA), determined only 13.5% of vaccine-eligible CCS initiated the HPV vaccine and 6% completed the series. Higher risk of HPV-related malignancies and lower rates of vaccination make CCS a particularly vulnerable population in critical need of intervention.

Overall Project Strategy: In South Texas, the majority of children with cancer receive their treatment as part of the South Texas Pediatric Minority Underserved NCI Community Oncology Research Program (STPMU NCORP). This network operates as a consortium of five regional pediatric institutions: UTHSCSA, Methodist Children's Hospital (San Antonio), Dell Children's Hospital (Austin), Driscoll Children's Hospital (Corpus Christi), and Texas Tech University Health Sciences Center El Paso (currently in process of joining the STMU NCORP). The catchment area for STPMU NCORP encompasses 113 counties and has a population approaching 10 million inhabitants, i.e. 36% of the population of Texas. Collectively the STPMU NCORP institutions follow approximately 1,486 pediatric cancer survivors across the state, approximately 1,279 of whom will be age-eligible for the HPV vaccine during the project period.

Our overall project goal is to increase HPV vaccination rates among eligible CCS who are actively followed within STPMU NCORP. We propose to accomplish this goal by: 1) delivering an evidence-based HPV provider and staff continuing education program focused on the unique risks and needs of childhood cancer survivors; 2) implementing practice-level changes to build an HPV vaccine-friendly culture and allowing for the monitoring of HPV vaccine eligibility status among childhood cancer survivors at five pediatric oncology sites across the state of Texas; and 3) offering on-site delivery of the HPV vaccine to eligible childhood cancer survivors at STPMU NCORP clinics.

Specific Goals: 1. At STPMU NCORP sites, we will deliver an evidence-based continuing education program to approximately 276 STPMU NCORP providers and staff, adapted to the unique needs of childhood cancer survivors to increase self-reported HPV vaccine recommendation practices. 2. Increase HPV vaccine initiation among 1,279 male and female childhood cancer survivors aged 9-26 who are at least 6 months off active treatment by at least 50% and to exceed U.S. national averages. 3. Increase HPV vaccine completion among 1,279 male and female childhood cancer survivors aged 9-26 who are at least 6 months off active treatment by at least 50% and to exceed U.S. national averages.

Innovation: Despite the increased vulnerability of CCS to secondary HPV-related cancers, this population has largely been neglected in the research, education, and large-scale HPV vaccine initiatives. With the rising incidence of HPV-related cancers in Texas, low uptake of HPV vaccination in this region, and increased susceptibility of CCS to HPV-related disease, targeting this population within the oncology follow-up setting is both novel and risk-directed.

Significance and Impact: Our program focuses both on a specific area of interest for CPRIT (HPV vaccination), and on a priority population, with childhood cancer survivors treated at STPMU NCORP sites mostly comprising a Hispanic ethnic minority and having low HPV vaccine rates with high risk of second HPV-related cancers. Additionally, because the NCORP is associated with the Children's Oncology Group, this program is well placed to inform future survivorship care guidelines and for dissemination across oncology centers nationwide.