



## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:  
PP150004

Project Title:  
A multi-pronged approach to increase HPV vaccination rates among adolescents 9–17 years of age from Galveston and Brazoria Counties

Award Mechanism:  
Evidence-Based Prevention Programs and Services

Principal Investigator:  
Berenson, Abbey

Entity:  
The University of Texas Medical Branch at Galveston

### Lay Summary:

Need: HPV vaccination is recommended for all adolescents 9–26 years of age. The efficacy is highest if given by age 12. However, some physicians may not discuss this vaccine with parents until the child is older because its protection against a sexually transmitted infection makes it an awkward topic. Moreover, many parents do not seek out this vaccine for their children, as they are not even aware that it is available. This lack of knowledge has led to suboptimal vaccination rates in many parts of the US. In Galveston and Brazoria Counties, vaccination rates are extremely low, especially among low-income, minority families served by UTMB. In a recent survey conducted in UTMB clinics located in these 2 counties, over half of mothers with 9–17-year-old children stated they had never heard of the HPV vaccine, and only 28% reported their children had received even 1 of the 3 required doses. This initiation rate is much lower than the average rate of 51% in Texas. Our survey also demonstrated that completion of all 3 doses in these counties (12%) is less than half of the state average (30%). Most parents, however, stated they were willing to allow their children to be vaccinated, suggesting that interventions to overcome identified barriers could dramatically increase the number of adolescents protected against HPV in the counties. Overall project strategy: This project will use a multi-pronged approach to increase HPV vaccination rates in Galveston and Brazoria Counties. First, we will educate health care providers about the vaccine's benefits and the need to routinely discuss it with parents of young adolescents not yet vaccinated. Next, we will hire and train Patient Navigators (PNs) to assist adolescents with initiating and completing the series. PNs will identify families who present to a UTMB pediatric clinic and have a child 9–17 years old who has not initiated or completed the HPV vaccine. To maximize outreach, we will assess each family whether or not the eligible child is present in the clinic (ie, if the clinic visit is for another child in the family). If the family is agreeable, the PN will educate them in private about the vaccine in a culturally appropriate manner. For those families who want to have a child vaccinated, the PN will obtain written consent and determine the most convenient and appropriate location to receive the injections. The PN will also make appointments, set up text and phone reminders, and reschedule missed appointments. Through a unique partnership, many parents will have the option of arranging for injections to be given at a child's school, which has been shown to increase completion rates far above the national average. If school vaccination is requested, the PN will send the consent form to the school and arrange for the school nurse to administer the vaccine. Finally, we will use

qualitative interviews to obtain data from parents who participate in this program on how it could be improved in the future, allowing us to determine which barriers the PNs were able to overcome and which remained as well as patient satisfaction with this type of intervention. Specific goals: We anticipate our strategy will result in educating 2128 families with a child 9–17 years of age who has not initiated or completed the HPV vaccine series. Of these, 1711 (1324 unvaccinated and 387 partially vaccinated adolescents) will receive at least 1 HPV injection through this project. Overall, we will markedly increase initiation rates from 26% to 83% and completion rates from 13% to 71% in this population of at-risk adolescents, surpassing current US and Texas HPV vaccination rates. Innovation: The effectiveness of PNs to increase HPV vaccination rates has been demonstrated, but has not yet been widely adopted. Moreover, it is unique to approach parents about obtaining the HPV vaccine when the adolescent is not present in the clinic. This approach will allow us to vaccinate hard-to-reach adolescents who see doctors infrequently. Finally, our ability to obtain the parent's consent in the clinic and have the school administer the vaccine will markedly increase vaccination rates in Galveston and Brazoria Counties. Significance and impact: This project will have a long-term impact on cancer prevention. UTMB providers will continue to counsel parents about the need to vaccinate their adolescents, even when they are not in the clinic. This approach will increase vaccination rates, as physician recommendation is the main reason families cite for accepting the HPV vaccine. Moreover, providers will become accustomed to allowing patients to obtain the vaccine at school-based clinics. We also anticipate this project will have a lasting effect because it will confirm the effectiveness of using PNs to increase HPV vaccination rates. Overall, this project has the potential to have a substantial impact on HPV vaccination rates and, ultimately, on the rates of HPV-related cancers in Texas.