Human Papillomavirus (HPV) Vaccination in Kentucky: An Environmental Scan

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**Context**
- Appalachian Kentucky faces disproportionately high incidence and mortality rates of HPV-related cancers. Correspondingly, Kentucky’s HPV vaccine initiation and completion rates are below national estimates for both male and female adolescents.

**Data Collection Projects**
- **Provider Survey** – A survey tool was created based on instruments from other NCI supplement grantees. It is currently in its pilot phase and, once finalized, will be distributed statewide to physicians, nurses, and other healthcare providers. It will assess (A) providers’ perceptions about HPV vaccine culture in their practices and across Kentucky, (B) barriers and facilitators to uptake and series completion among their patients, and (C) plans for Gardasil 9.
- **Identification of Providers in Appalachian Kentucky with High HPV Vaccine Uptake Rates** – Using Comprehensive Clinical Assessment Software Application (CoCASA) data, 3 practices in Pike County, Kentucky were identified as high HPV vaccine coverage areas. Additional funding from the UK Appalachian Center is being used to interview 6 providers from these clinics to identify best practices and develop peer recommendations.
- **Kentucky Department for Medicaid Services (DMS)** – HPV vaccination data is not routinely collected in the Kentucky Immunization Registry. Alternative data sets are being explored to inform the environmental scan, including data from DMS (2006–present). These data are available by county, age, provider type, and race.
- **Media Scan** – The UK Department of Communication is assisting in a media scan through their CommTV system: a searchable, streamable, television archive of HPV vaccine-related terms, including coverage of Gardasil 9, will be assessed.

**Environmental Scan**
Our environmental scan process included the following steps:
1. Collecting and organizing available HPV-related disease and vaccination data; 2. Reviewing and updating Kentucky’s Cancer Action Plan; 3. Learning from other state efforts; 4. Completing a literature review; 5. Performing key informant interviews with existing coalitions, health systems, healthcare providers, public health programs, and related organizations; 6. Executing a policy scan (including the impact of the Affordable Care Act on HPV vaccination); 7. Examining the current public health practice and research environments; 8. Conducting a media scan (particularly tracking media attention surrounding FDA approval and Merck’s roll-out of the new 9-valent HPV vaccine); and 9. Development of future research priorities.

**Findings to Date**
- Nearly 700 providers in Kentucky participate in the Vaccines for Children (VFC) Program, including all Local Health Departments. The VFC will only provide Gardasil, not Cervarix.
- Currently, no legislative mandate requires providers to report HPV vaccine to the Kentucky Immunization Registry. Additionally, due to changes in statewide EMR/EHR systems, the registry is in transition and cannot be queried at this time.
- Kentucky has one local immunization coalition. It is in Northern Kentucky and serves Boone, Campbell, Grant, and Kenton Counties.
- In 2013, Kentucky’s HPV vaccine completion rate for females age 13-17 (26.8%) was lower than the US rate (37.6%). Data on males completing the series are incomplete for Kentucky. The initiation rate for Kentucky males ages 13-17 (19%) was lower than US males (35%).
- In Kentucky, pharmacists have statutory authority to administer HPV vaccine. They typically do not participate in the VFC program and require a third party payer. CAPNET, their Practice Based Research Network (PBRN), is interested in immunization-related research projects.

**Discussion**
- At the end of the 1-year funding period, all gathered information will be synthesized into a useful format and subsequently shared with NCI as well as national, state, and local partners, including those who participated in the project.
- Further, promising research opportunities will be identified and additional funding will be sought for projects aimed at increasing HPV vaccination coverage in Kentucky.

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