NCI-Designated Cancer Centers Administrative Supplements to Investigate HPV Vaccine Uptake: Environmental Scan Findings

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November 14, 2019
6th NCI Cancer Centers HPV Vaccination Summit
Harold C. Simmons Comprehensive Cancer Center
Timeline

- 2006: Gardasil-4
  - 3 doses for girls at age 11 or 12

- 2009: Gardasil-4
  - 3 doses for boys at age 11 or 12

- 2011: Cervarix

- 2014: Gardasil-9
  - 2 doses if started before age 15

- 2016:
  - NCI cancer center supplements—Round 1

- 2017:
  - President’s Cancer Panel Report
  - NCI cancer center supplements—Round 2

- 2018:
  - Cancer Moonshot Blue Ribbon Panel Report
  - FDA approval expanded to include adults up to 45 years old

- ACIP recommendations for routine HPV vaccination

- HPV vaccines available in U.S.
Supplement Goals

**Round 1**

- **Short term**
  - Conduct an environmental scan
  - Develop/enhance linkages with existing coalitions and programs

- **Long term**
  - Utilize enhanced collaborations to develop or expand applied research to increase HPV vaccine uptake

**Round 2**

- **Short term**
  - Identify low-uptake areas within the cancer center catchment area
  - Conduct an environmental scan to identify local barriers, facilitators, and implementation strategies

- **Long term**
  - Develop or expand applied research to increase HPV vaccine uptake
Supplement Recipients
Cancer Center Collaborations

- Cancer Center Meetings

![Bar chart showing the number of cancer centers represented from various cancer centers.]

- Moffitt
  - January 2015: 32
- MD Anderson
  - November 2015: 23
- OSU
  - June 2016: 29
- South Carolina
  - May 2017: 32
- Huntsman
  - June 2018: 41
- UTSW
  - November 2019: 24

Legend:
- Red: Round 1
- Blue: Round 2
- Gray: Did not receive supplement
Cancer Center Collaborations

- Cancer Center Meetings
- Joint statements
Cancer Center Collaborations

- Cancer Center Meetings
- Joint statements
- Resource sharing

Round 1
- Lessons learned
- Research tools & resources
- Collaborations

Round 2
Summary of Supplement Recipient Activities and Outcomes
Reports on Supplement Recipient Activities and Outcomes

Both reports available on NCI “HPV Vaccine Uptake in Cancer Centers” website:

https://healthcaredelivery.cancer.gov/hpvuptake/
Summary Reports: Methods

Data Sources
- Grantee final reports
- Grantee progress reports
- Abstracts/posters from most recent HPV meeting
- Follow-up emails with grantees
- 2018 Survey Monkey
- 2019 survey update (Round 1 only)

Methods
- Reviewed information provided by grantees.
- Developed and implemented coding schemes for linkages made, environmental scan activities & results, and other activities/outcomes.

Limitations
- Variation in environmental scan focus/activities.
- Based on grantee self report (varying level of detail provided in reports & survey responses).
- Some environmental scans not complete at time of final report/survey.
Supplement Goals

- Conduct environmental scans
- Develop/enhance linkages
- Develop/expand applied research
Linkages with Local and Regional Organizations

- Providers, clinics, hospitals, health systems
- State/local health departments
- Parents
- Cancer organizations/coalitions

- Vaccine manufacturer
- HPV vaccine organizations/coalitions
- Schools
- Professional organizations
- Immunization organizations
- Community/nonprofit organizations
- Academic institutions (home & other)

- Policymakers
- Faith-based organizations
- Area Health Education Centers
- Insurance companies
- Adolescents
- Advocates/survivors
HPV Vaccine Coalitions, Organizations, and Work Groups

- State HPV coalitions and roundtables
- HPV vaccine work groups within state cancer consortia, cancer control planning groups, or immunization coalitions

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<thead>
<tr>
<th>Round</th>
<th>Number of Grantees</th>
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<td>Round 1</td>
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Number of grantees that formed linkages with or helped establish HPV vaccine organizations/coalitions

- Round 1—most newly established
- Round 2—most already established, a few new, one under discussion
Environmental Scan Activities and Goals

**Activities**

- Interviews
- Surveys
- Focus groups
- Social media analyses
- Policy analyses
- Literature reviews
- Media scans
- Concept mapping
- Resource scans

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**Number of Grantees**

- Identify barriers/challenges
- Identify facilitators
- Identify provider/clinic practices
- Characterize attitudes/beliefs
- Identify activities promoting vaccination
- Assess knowledge
- Identify priorities and opportunities
- Develop partnerships/collaborations
- Identify research
- Parents' decision to vaccinate (hesitancy)
- Identify relevant policies
- Characterize local news coverage

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**Round 1**

**Round 2**
## Most Commonly Identified Barriers and Challenges

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*Less common in Round 2 vs Round 1*
Vaccination Rate Analyses

Limitations

- Inconsistent data entry
- Reporting not mandated
- Lack of historical data
- Inability of providers to retrieve data
- Failure to merge records
- Challenges with provider data entry

Data Sources Used

- State immunization registries
- County databases
- Survey data
- Institutional/health system data

Number of grantees that reported on vaccination rate analyses

Round 1: 12
Round 2: 7
Policy: Schools and Pharmacies

Round 1

- Schools/school entry requirements
- Pharmacist-administered vaccinations

Round 2

- Grantees that did policy analyses did not mention schools or pharmacies.
- Several grantees described interactions with schools and their importance as partners in promoting HPV vaccination.
- Only a few grantees reported engaging pharmacists or pharmacies.
Sustaining HPV Vaccine Promotion and Research

- Partnerships and collaborations
- Cancer Center leadership support
- Cancer Center Community Outreach
- Grant funding

Key Partners
- Coalitions
- ACS
- AAP
- Public health
- Health systems
Continuing HPV Vaccination Research: Research Grants

Number of grantees that have received grants to continue work on HPV vaccination

- Round 1: 9
- Round 2: 5

Number of grants received to continue work on HPV vaccination

- Round 1: 24
- Round 2: 8

Total = 32

Number of Grants by Funding Organization

- NIH
  - 13 grants
- NCI
  - 12 grants
- NICHD
  - 7 grants
- ACS
- CDC
- AHEC
- AAP local chapters
- Foundations
- Other

Total grants = 32
Outreach and Interventions to Promote HPV Vaccination

Providers, Clinics, Healthcare Systems

- Education/training sessions
  - Professional conferences
  - School nurses
  - Rural providers
  - VFC providers
- Exploring dental hygienists as promoters of HPV vaccination
- Quality improvement initiatives

Parents, Adolescents, Public

- Social media campaigns
- Outdoor media
- Educational program for college students
- Promotoras/community health workers
- Health fairs
- *Someone You Love* viewings
Lessons Learned: HPV Vaccine Promotion

Factors that influence HPV vaccination are complex.

- Partnerships are critical, especially outside cancer community.
- Provider recommendations and communication are key.
- Clinic-/practice-based interventions are needed.
- Parent education is still important (to counteract misinformation).
- Social media can be a valuable tool or a mechanism to spread misinformation.
- Uptake and challenges vary by population (rural, racial/ethnic).
Lessons Learned: Research

- Engaging stakeholders is time-intensive.
- “Competitor” healthcare systems may be hesitant about collaborating. “Neutral” partners can help broker relationships.
- Non-cancer organizations have competing priorities.
- Physicians often do not want to complete surveys.
- Recruiting undecided parents is challenging.
- Anti-vaccine groups are very vocal on social media.
Summary

- 30 NCI-designated cancer centers received supplements.
- Cancer centers have worked together to address HPV vaccination through research and advocacy.
- Cancer centers have built and maintained partnerships with local/regional organizations, including coalitions.
- Cancer centers have sustained their work on HPV vaccination through cancer center support and external funding.
Next Steps

Current Funding Opportunity

- Linking the Provider Recommendation for Adolescent HPV Vaccine Uptake (R03, R21, R01)
  - Webinar on Thursday 11/21/19 at 1 pm (EST)

Opportunity to provide input regarding future research opportunities

Future Meetings