Examination of HPV Vaccine Uptake and Physician Attitudes and Practices Surrounding Vaccination

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Purpose

• To develop a better understanding of HPV vaccine uptake rates, practices, and attitudes surrounding HPV in our catchment area (CA)
• To develop and employ implementation strategies to promote uptake of the HPV vaccine
Figure 1 Map of Pennsylvania counties. Counties that make up UPCI’s western PA catchment area are colored red (for urban), pink (for suburban), or green (for rural).
Mixed Methods Approach
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>Ethnicity</th>
<th>Diagnosis</th>
<th>Treatment</th>
<th>Follow-up</th>
<th>Phone</th>
<th>Email</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Doe</td>
<td>35</td>
<td>Male</td>
<td>White</td>
<td>-</td>
<td>Lung Cancer</td>
<td>Chemotherapy</td>
<td>6 months</td>
<td>123-456-7890</td>
<td><a href="mailto:jdoe@email.com">jdoe@email.com</a></td>
<td>123 ABC St, Pittsburgh, PA 15213</td>
</tr>
<tr>
<td>Jane Smith</td>
<td>42</td>
<td>Female</td>
<td>Black</td>
<td>-</td>
<td>Breast Cancer</td>
<td>Radiation Therapy</td>
<td>2 years</td>
<td>456-789-0123</td>
<td><a href="mailto:jsmith@email.com">jsmith@email.com</a></td>
<td>456 DEF St, Pittsburgh, PA 15220</td>
</tr>
<tr>
<td>Bob Johnson</td>
<td>50</td>
<td>Male</td>
<td>Hispanic</td>
<td>-</td>
<td>Prostate Cancer</td>
<td>Hormone Therapy</td>
<td>3 years</td>
<td>789-012-3456</td>
<td><a href="mailto:bjohnson@email.com">bjohnson@email.com</a></td>
<td>789 GHI St, Pittsburgh, PA 15235</td>
</tr>
</tbody>
</table>

**Sampling**
Platform

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Pilot

• Survey was piloted by physicians
  – Suggested revisions to response scales
  – Specify local vs systemic side effects
  – Avoid debate about school mandated HPV vaccination
Study Procedure

- Initial invitations and surveys sent electronically
- Subsequent reminders sent as needed
- Reminders emphasize the importance of each physician’s response
- Mailings and phone calls utilized where needed
Preliminary Data

• Who is Responding? (n=74)
Demographics

• Working Response Rate = 14% (74/529)
• 58% Female
• 84% White, non-Hispanic
• Majority—Age 50 or older
HPV vaccination does not cause serious side effects
HPV vaccine protects against genital warts in addition to cervical cancer

![Chart showing agreement levels among DOs, Family Physicians, and Pediatricians.

Strongly agree: DOs, 2; Family Physicians, 28; Pediatricians, 31.

Agree: DOs, 6; Family Physicians, 4; Pediatricians, 2.

Neither agree nor disagree: DOs, 2; Family Physicians, 1.

Disagree: DOs, 1; Family Physicians, 0; Pediatricians, 0.

UPMC HILLMAN CANCER CENTER]
HPV vaccination eliminates the need for pap tests

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

- **Agree**: 2
- **Neither agree nor disagree**: 5
- **Disagree**: 20
- **Strongly Disagree**: 12

**Count**

- **DO**: 2
- **Family Physician**: 5
- **Pediatrician**: 3
How comfortable or uncomfortable are you discussing the HPV vaccine with patients/parents?

- Extremely comfortable:
  - DO: 2
  - Family Medicine Physician: 32
  - Pediatrician: 34

- Moderately comfortable:
  - DO: 5
  - Family Medicine Physician: 1
  - Pediatrician: 1
I believe that how I present the HPV vaccine has an influence on patients receiving the vaccination.
How familiar are you with the current HPV administration guidelines?

- Extremely familiar: 26
- Very familiar: 16
- Moderately familiar: 9

Count
Preliminary Results

- Opportunities for education on HPV vaccination
- Comfort discussing HPV vaccination with parents, belief that clinicians can influence uptake, and familiarity with guidelines is high in this sample
- Pediatricians (74%/55%) “extremely familiar” with guideline compared to FMP (p<.05)
Lessons Learned Along the Way

• “Gatekeeper” cooperation often needed to gain access to physician emails
• “Approximately how many doses of vaccine do you administer each month?”
• Paper surveys preferred by some physicians
• Phone calls ineffective for recruitment
Post-Study Intervention Plans

• Quantitative and qualitative results of survey will be used to develop tailored interventions
• Re-engage HPV Task Force
• Engage with other Immunization Coalitions throughout PA
Collaborators

• University of Utah, Deanna Kepka, PhD, MPH
• UPMC Health Plan
• Participating physicians