Physician Communication about HPV Vaccine: What Will Motivate Parents?

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HPV-Attributable Disease

- Penis: 400
- Vagina: 500
- Juvenile-Onset RRP: 820
- Vulva: 1,600
- Anus: Female 1,600, Male 2,900
- Oropharynx: Female 5,900, Male 1,500
- Cervix: 11,500

Includes Males and Females

Female
Male
U.S. Vaccination Coverage, Ages 13-17

Data from National Immunization Survey – Teen

* APD = Adequate provider data
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Data from National Immunization Survey – Teen
Parents’ Reasons for Not Getting HPV Vaccine

- No provider recommendation
- Not knowing enough
- Safety concerns/side effects
- Not necessary

National Immunization Survey – Teen, 2013. (Stokley et al., 2014)
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Physician Communication

Tips and Time-savers for Talking with Parents about HPV Vaccine

9 statements designed to help physicians give an effective recommendation
Purpose

Identify messages for recommending HPV vaccine
- useful to physicians
- persuasive to parents
- shorter
Parents

Physicians

2014 - 2015

n = 1504, have son or daughter, age 11 - 17

44% male

38% no college education

68% male

53% pediatric specialty

55% ≥20 years in practice
Parents

2014-2015

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have son or daughter, age 11-17
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Physicians

53% pediatric specialty

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2014-2015

\( n = 1504, \)

have son or daughter, age 11-17

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Physicians

2014

\( n = 776, \)

pediatrician or family physician; provide preventive care to patients ages 11-17
Parents

2014-2015

\( n = 1504, \) have son or daughter, age 11-17

- 44% male
- 38% no college education

Physicians

2014

\( n = 776, \) pediatrician or family physician; provide preventive care to patients ages 11-17

- 68% male
- 53% pediatric specialty
- 55% \( \geq 20 \) years in practice
Motivational Messages
Motivational Messages

• 9 long, developed by CDC

HPV vaccine has been carefully studied by medical and scientific experts. HPV vaccine has been shown to be very effective and very safe. Like other shots, most side effects are mild, primarily pain or redness in the arm. This should go away quickly, and HPV vaccine has not been associated with any long-term side effects. Since 2006, about 57 million doses of HPV vaccine have been distributed in the U.S., and in the years of HPV vaccine safety studies and monitoring, no serious safety concerns have been identified.
Motivational Messages

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HPV vaccine has been carefully studied by medical and scientific experts. HPV vaccine has been shown to be very effective and very safe. Like other shots, most side effects are mild, primarily pain or redness in the arm. This should go away quickly, and HPV vaccine has not been associated with any long-term side effects. Since 2006, about 57 million doses of HPV vaccine have been distributed in the U.S., and in the years of HPV vaccine safety studies and monitoring, no serious safety concerns have been identified.

• 6 brief, developed by study team

I see you got hepatitis B vaccine for Jacob. That’s also a cancer vaccine for an infectious disease.
Motivational Messages

Parents

15 messages
Motivational Messages

Parents

15 messages

Panel A  Panel B  Panel C

2 brief + 3 long messages
Motivational Messages

Parents

15 messages

- Panel A
- Panel B
- Panel C

2 brief + 3 long messages

Physicians

6 brief messages
Parents

Which of these statements made by a doctor would persuade you to get HPV vaccine for [child’s name]?
Message Endorsement

Parents
Which of these statements made by a doctor would persuade you to get HPV vaccine for [child’s name]? 

Physicians
Which of these statements would you use to persuade parents to get HPV vaccine for their 11-12 year old?
Message Endorsement

✓ 78%
Message Endorsement

78% ✓

93% ✓
Highly Endorsed Brief Messages

I strongly believe in the importance of this cancer-preventing vaccine for Jacob.

65% parents  69% physicians
Highly Endorsed Brief Messages

I strongly believe in the importance of this cancer-preventing vaccine for Jacob.

65% parents  69% physicians

Emma can get cervical cancer as an adult, but you can stop that right now. The HPV vaccine prevents most cervical cancers.

59% parents  64% physicians
## Brief vs. Longer Messages (Parents)

<table>
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<tr>
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<th>% Persuasive Brief</th>
<th>% Persuasive Longer</th>
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Message Endorsement by HPV Vaccine Intentions

Parents of an unvaccinated child, $n = 809$

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<th>Intention to get HPV vaccine for child</th>
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<td>Definitely will $n = 45$</td>
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Number of messages endorsed
- 0
- 1-5
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<td>Probably will, n = 184</td>
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**Message Endorsement by HPV Vaccine Intentions**

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<td>Probably will $n = 184$</td>
<td>6% 94%</td>
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<tr>
<td>Probably won't $n = 312$</td>
<td>25% 75%</td>
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Number of messages endorsed
- 0
- 1-5
Message Endorsement by HPV Vaccine Intentions

Parents of an unvaccinated child, $n = 809$

- **Definitely will**, $n = 45$
  - Number of messages endorsed: $100\%$

- **Probably will**, $n = 184$
  - $6\%$: 0 messages
  - $94\%$: 1-5 messages

- **Probably won't**, $n = 312$
  - $25\%$: 0 messages
  - $75\%$: 1-5 messages

- **Definitely won't**, $n = 268$
  - $67\%$: 0 messages
  - $33\%$: 1-5 messages
Message Endorsement by HPV Vaccine Intentions

Endorsement was associated with greater intentions to vaccinate (all \( p < .001 \))
No Disparities in Message Endorsement

- Parent race/ethnicity
- Parent education
- Child age
- Child sex

All $p > .05$
Key Findings

• Brief and longer messages were effective
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• Some messages were endorsed by parents disinclined to vaccinate
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• Some messages were endorsed by parents disinclined to vaccinate

• No disparities in messages endorsement
Future Directions

• Examine association between message use and vaccine uptake
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• Distinguish between messages designed to address parent concerns and messages intended to direct parents to vaccinate
Thank You

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