

# Quantitative and Qualitative Evaluation of Pediatrician Attitudes and Barriers to HPV Vaccination Sarah E. Dilley<sup>a</sup>, Allison A. McGuire<sup>b</sup>, J. Michael Straughn Jr.<sup>a</sup>, Charles A. Leath III<sup>a</sup>, Isabel C. Scarinci<sup>b</sup> <sup>a</sup>University of Alabama at Birmingham, Department of Obstetrics and Gynecology, <sup>b</sup>University of Alabama at Birmingham, Division of Preventive Medicine

### BACKGROUND

- **Quantitative Survey** • Despite introduction of the HPV vaccine over ten years 49 respondents ago, nationwide HPV vaccination rates remain well -57.1% pediatricians, 40.8% family medicine below the Healthy People 2020 goal of 80% 96% recommend HPV vaccination. completion.
- Two-dose vaccine schedule completion rates in Alabama were 50.4% for girls and 30.3% for boys in 2015.
- Common messages used included the provider's own personal belief in the importance of HPV vaccination Provider recommendation is the most influential factor (74%) and the link between the vaccine and cervical in parents' decision to vaccinate their children. cancer prevention for girls (80%).
- The National Cancer Institute has identified increasing **System barriers** endorsed by >40% of providers HPV vaccine uptake in pediatrician offices as a major include "HPV vaccination is not required for school priority. attendance" and "difficulty ensuring that all patients will Our objective was to gain insight from pediatricians complete the 3-dose series". in our state as to the factors affecting HPV
- There were very few provider barriers identified. vaccination rates, as well as their strategies for • Patient barriers identified included: improving HPV vaccine uptake.

# METHODS

- A statewide survey was sent to members of Alabama AAP and AAFP chapters.
  - Survey asked questions about provider HPV vaccination recommendation and provision patterns, barriers to HPV vaccination, and existing provider strategies for HPV vaccination provision.
- Pediatricians were interviewed in counties with <20%</li> HPV vaccination rates
- A standardized interview with open-ended questions was conducted by one investigator.
  - Two separate investigators evaluated the interviews for themes using an iterative sampling approach, these themes were combined and representative themes agreed upon
  - Themes that occurred in 5 or more interviews were considered to be major themes.
  - Qualitative data was organized using NVivo software.
- This study was performed prior to the 10/2016 CDC recommendation for a two-dose HPV vaccination schedule for children <15 years of age.

# RESULTS

 87.2% often/always recommend the vaccine with Tdap/meningitis vaccines for girls, 76.5% for boys.

- Lack of parental understanding about HPV vaccination
- Parental belief that their child is not at risk for HPV
- Concern that the vaccine is not safe
- Reluctance to discuss sexuality and/or STIs
- Concern that the vaccinated child will practice riskier sexual behaviors
- Suggested strategies included reminder systems for 2<sup>nd</sup>/3<sup>rd</sup> doses and guidance for making recommendations for parents in an easy-to-read form.

# **Qualitative Interviews**

- 9 pediatricians interviewed.
- 4 males and 5 females; age range (41-74).
  - All had been in practice at least 10 years.
  - Patient populations served by this group include large proportions of racial/ethnic minorities and patient with a variety of insurance providers.
- All providers recommend the vaccine to both boys and girls, and all used "opportunistic" approaches to providing the vaccine.
- Major themes identified from the qualitative interviews were divided into categories.

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### Word Cloud



Theme	# of Pediatricians (n=9)
Barriers isinformation on internet oncern about vaccine safety plication that child is (or will be) sexually	5 5 7
<b>r Barriers</b> ne	7
<b>Barriers</b> ficulty getting adolescents into clinic surance (lack of coverage, low mbursement)	5 5
ner (behavior, SES, etc.) variables not a tor and up th other vaccines portunistic me for boys and girls	7 8 8 9 9
ing link vaccine with sexual behavior gender difference in messaging rsonal life experiences rsonal or family experience with HPV ccine ncer prevention	5 5 5 7 9
es mmunity outreach tient education materials ovider metrics anding orders at messaging alk-ins rse visits rtner with schools ucation of clinic staff IR reminders ovider training fice champion	5 5 5 5 5 5 5 6 6 7 7 7 7 8

"When I was in medical school if you had told me that there would be a vaccine that would prevent cervical cancer and that people wouldn't want it because they thought it was a government plot, I would have told you that you were nuts."

"Oh they get the other vaccines. It's real simple – it has to do with the fact that it involves admitting that their child will one day be sexually active...."

"The second or third (dose) we just lose them."

*"It tends to come better from the physician and we are the ones who* have more of a relationship with that parent and that family. The parents want to hear from us."

"... all of us have a limited time to address problems and you have got to – you have to choose your battles. And for me to choose the battle of having a long discussion about this with someone who is against it is frankly a massive waste of my time"

- cancer prevention.
- 2nd and 3rd doses.

### CONCLUSIONS

 The most common system barriers identified included infrequency of routine adolescent visits, lack of HPV vaccination requirement for school attendance, and difficulty ensuring patients complete subsequent doses.

 Common perceived patient-level barriers included parental belief in a link between sexual activity and the vaccine and concerns about vaccine safety.

The most frequently cited messaging strategy was a focus on

• Supported strategies for increasing vaccination rates included provider and clinic staff education, and reminder systems for the

• This data will be utilized to develop a multi-level intervention to increase HPV vaccination rates in counties and clinics in Alabama with low vaccination rates.

 As pediatrician recommendation is the most influential factor in parental decision to vaccinate, this insight into their practices and attitudes will be a cornerstone of intervention development.