Subject: Physician Role in Increasing Vaccination for HPV

Presented by: David Lakey, MD, Chair

Referred to: Reference Committee on Science and Public Health

Background

The first human papillomavirus (HPV) vaccine was licensed for use in females ages 9-26 years, according to the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) recommendations in 2006, with updated recommendations for the use of the 9-valent vaccine in females and males in 2014. After twelve years of use in the general population of the United States and other countries worldwide, it has been established as a safe and effective vaccine that will prevent HPV-associated cancers in women and likely in men; yet, there has been a substantial lag in uptake in the United States, especially in certain states. The multi-specialty Texas Medical Association HPV Workgroup convened at the 2017 TMA Winter Conference, after David Lakey, MD, chair of the TMA Council on Science and Public Health, recognized the need for a well-coordinated effort among several TMA committees to increase the uptake of HPV vaccine in Texas. Important partners invited to participate in this effort included representatives of the ImmTrac2 group at the Texas Department of State Health Services (DSHS), Texas Pediatric Society (TPS), University of Texas (UT) System, Texas Health Improvement Network, MD Anderson Cancer Center, and the Texas Cancer Coalition/American Cancer Society. Face-to-face meetings of this workgroup occurred in January, March, July, and September 2017, and several teleconferences took place between April 2017 and January 2018.

Data from the 2016 National Immunization Surveys (NIS) Teen Survey were published in the Morbidity and Mortality Weekly Report (MMWR) on August 25, 2017 and summarized by the UT System Population Health Group in its recent report, Missed Opportunity: Human Papillomavirus Vaccination. These reports were disseminated to physicians in Texas and provide additional support for the work of this group. In summary, less than half (49.3 percent) of Texas adolescents aged 13-17 years had received one HPV vaccine in 2016. Texas ranks 47th (including the District of Columbia) in its HPV vaccination rate of teens, well below all but four other states in the country. The specific tasks for the HPV workgroup were to identify potential barriers to vaccination and develop strategies to improve HPV vaccination rates in Texas.

This report summarizes the obstacles identified and discusses evidence-based strategies for physicians and institutions to overcome these obstacles and increase the rate of HPV vaccination in Texas, thereby improving the health of Texans. While there is more work to be done by this HPV workgroup, the TMA Council on Science and Public Health will identify further steps in consultation with its committees.

Development of Goals of TMA’s HPV Workgroup

The TMA HPV Workgroup convened for the first time on Jan. 27, 2017, during TMA’s 2017 Winter Conference. Workgroup members discussed the Texas Health and Human Services Commission (HHSC) HPV Strategic Plan released in December 2016. The workgroup evaluated whatever current Texas vaccination data could be obtained (2015 Teen Survey), data from groups who were engaged in studies, and were able to share the data they had collected. The following needs and barriers to increase acceptance of HPV vaccine by families and patients were identified by the workgroup:
a) A need to reframe the conversation about HPV vaccine to stress the role in prevention of cancer in females and males and to administer the vaccine at the same time as the state-required pre-teen doses of Tdap and MenACWY vaccines.
b) Lack of physician knowledge of the published safety and effectiveness data of HPV vaccine and data that demonstrate that receiving the HPV vaccine does NOT encourage sexual promiscuity.
c) A need for widespread dissemination of communication skills that have proved successful in dispelling the myths associated with the HPV vaccine and improving vaccine acceptance.
d) Overestimation of physicians of the reluctance of families to accept HPV vaccine for their sons and daughters.
e) Time required to discuss this vaccine with families who are in need of more information.
f) Importance of providing HPV vaccine in the medical home at the same time as the Tdap and MenACWY vaccines in order to ensure that many of the other recommended preventive medicine screenings and counseling are provided; obtaining HPV vaccine by pre-teens in a pharmacy is not an optimal public health approach.
g) Lack of a fully functional statewide immunization registry (ImmTrac2) for tracking vaccine data by practice or clinic and non-participation of physicians; such registries have proven to be critical components of achieving high statewide vaccination rates.
h) Lack of consistent physician tracking of their HPV vaccination rates within their practice or clinic. This can be accomplished via electronic medical record (EMR) systems or via a fully functional ImmTrac2 system. Many physicians are not sufficiently well versed in the function of the EMR to produce such reports.
i) Unfamiliarity of physicians with stories of men and women who have survived an HPV-associated cancer.

After several meetings, the workgroup developed the following goals for 2017-2018:

a) Develop and promote a robust, physician-curated, HPV Resource Center on the TMA website.
b) Develop a HPV Data Workgroup to identify data deficiencies and interventions as needed.
c) Coordinate TMA communications to provide members with tangible strategies to improve HPV vaccination rates.
d) Leverage stakeholder interest on improving HPV rates in Texas. This includes: Texas Health Improvement Network, American Cancer Society, MD Anderson Cancer Center, Texas Pediatric Society, Texas Academy of Family Physicians, DSHS/HHSC, the Texas School Nurses Association, etc.
e) Identify and disseminate best practices for HPV immunization rates focused on education, communication, vaccine delivery, and vaccine rate tracking. The most important factor in HPV vaccine acceptance is strong physician recommendation.
f) DSHS to share HPV county data with those epidemiologists responsible for immunization programs in their jurisdictions.
g) Explore development of novel programs to deliver HPV education and/or vaccine in schools and on college campuses through the Texas Health Improvement Network with TMA’s Be Wise – ImmunizeSM program.
h) Adopt the recommendations of this report as House of Delegates policy at TexMed 2018.

TMA HPV Data Group

Dr. Lakey appointed Jane Siegel, MD, Chair of TMA’s Committee on Infectious Diseases, to chair the HPV Data Group. It was evident that with a goal of improving the HPV vaccination rate in Texas, a reliable data collection system was needed. Volunteers from the workgroup were asked to participate if they had an interest.
The findings of the data workgroup include:

a) A priority of the HPV data group was to define capability of collecting state data and work with DSHS to develop interventions as needed. Establishing a validated baseline for HPV vaccination rates is necessary to measure effectiveness of interventions developed. When physicians review the vaccination rates in their practices/clinics, they are often surprised to see the results and are motivated to work at increasing those rates. A fully functional registry should have the capacity to generate physician-specific reports. DSHS launched the implementation of a new ImmTrac2 registry using the template that has been found to be very successful in Wisconsin, but many obstacles in Texas have been identified. It is anticipated that ImmTrac2 will be a fully functional state immunization registry.

Although there has been much concern about the barrier of having an “opt-in” vaccine registry, Texas’ high consent rate at birth of 94-96 percent and a consent withdrawal rate of <1 percent suggests that this should not be a significant obstacle to maintaining data on immunizations in children <18 years of age. Rather, it is the physician participation and the logistical details that need to be addressed in order to assure universal participation of physicians in the immunization registry. The top two priorities regarding consent are:

i. Assuring that those children who have moved to Texas are consented for ImmTrac2 and that their historical vaccine data from their state of origin are submitted to ImmTrac2.

ii. Improving the consent rate for 18-year-olds from the current 4.8 percent.

Working with DSHS, especially on the immunization registry, is necessary to enhance the function of ImmTrac2 as our state registry. Standardization of methodology of data collection, analysis, and presentation is needed and will benefit from efforts made to collaborate with the various electronic health record (EHR) systems. According to TMA data, more than 70 percent of physicians use EHRs, and approximately nine EHR systems are the most commonly used. However, each EHR has a different way of interfacing with ImmTrac2, which poses a challenge facing ImmTrac2 and its ability to upload data consistently.

b) Three clinics/practice networks in different locations in Texas were identified whose physicians had been tracking their HPV vaccination rates as part of funded studies and were willing to share their data for the purpose of determining feasibility. Lessons learned from the data collected at these locations include:

i. It is feasible to track individual physician immunization rates at regular intervals within a clinic/practice network.

ii. A clinic/practice network will benefit by designating an individual(s) to oversee the management of the EHR system to generate physician specific reports at regular intervals, to analyze trends, and to validate the interaction with ImmTrac2, including uploads, correction of rejections, consent for 18 year olds and for patients who have moved to Texas from other states. The latter group may be willing to consent since most have moved from states with functional immunization registries.

iii. HPV vaccine acceptance rates are increased when:
   a. Communication skills developed for vaccine-hesitant families are used.
   b. HPV is bundled with Tdap and MenACWY vaccines.
   c. Vaccination status is reviewed at every patient visit.
   d. Needed vaccines are offered at all visits.
   e. The vaccine series is initiated at <15 years of age because only two doses will be required.

iv. Education of all office/clinic staff is beneficial, especially of medical assistants (MAs), to assure consistent messaging to families.
Understanding how to present data for trending vaccination rates will assist physicians in identifying areas for improvement.

Additional Findings and Suggestions of the HPV Workgroup

a. The Texas Pediatric Society (TPS) has participated in a pilot EQIPP (Education in Quality Improvement Pediatric Project) program for Maintenance of Certification (MOC) credit sponsored by the American Academy of Pediatrics (AAP). TPS recruited eleven pediatric practices to complete the EQIPP module that included an educational webinar on HPV vaccination and communication strategies and collection of baseline and post-educational HPV vaccination rates from twenty charts identified randomly. Of note, there was only a modest improvement because the participating physicians already were utilizing the recommended tools and had achieved approximately 80 percent HPV vaccination rate of at least one dose at baseline.

b. Physicians participating in these summer meetings of the HPV Data Group all agreed that becoming more aware and understanding the “big picture” of the state of HPV vaccination in Texas was very valuable. Drivers to improve data collection and gaps between physician daily practices and availability of data to measure effectiveness of interventions need to be identified.

c. Identifying a local community champion(s) who may serve as a resource and “cheerleader” for physicians has been helpful in some locations.

d. Educate physicians to track their vaccination rates. Experts on EHR systems may need to be involved.

e. Recognizing the role of school nurses and school administrators in educating students and families, which is under investigation.

f. The importance of collaborating with other societies of physicians, e.g. family practice.

HPV Tools, Social Media, and Deliverables

TMA developed a physician-curated HPV Resource Center on the TMA website, located at www.texmed.org/HPV. The site includes links to a variety of educational materials, as well as tools for physicians to improve their vaccination efforts, such as: CDC toolkits, a customizable CDC power point titled, “You are the Key to Cancer Prevention,” and stories told by both male and female survivors of HPV-associated cancers. This site will undergo periodic review with updates as needed. Copies of TMA’s infographics over HPV is provided in Appendix A.

Physician leadership to advocate for the HPV vaccine with patients is critical. TMA should continue to educate physicians about the importance of following the ACIP recommended immunization schedule, along with utilization of EHR systems to track their own progress and to upload data into ImmTrac2. This will be part of TMA education efforts including the Texas Medical Association Foundation (TMAF)-funded social media campaign.

The $20,000 TMAF-funded campaign will occur in two communities—San Angelo and Tyler. The social media to be purchased will include Facebook, Instagram, and Spotify. The message is still in development but will frame HPV as cancer control for the college-age population and will announce the dates for a Be Wise – ImmunizeSM Clinic. Advertisements are likely to be fifteen seconds and can be targeted by zip code. Typical social medial measurements such as number of opens, click rates, etc., will be used to evaluate effectiveness. Two additional measurements will include where the student who received the vaccination heard about the clinic, along with a count of the number of HPV shots administered. Each
site has a local champion. For San Angelo, a spring festival in March will be the site of one of the clinic events. One hundred doses of the HPV vaccine have been secured in San Angelo. In Tyler, the Be Wise – ImmunizeSM shot event will be held at UT Tyler and then again at Tyler Junior College. Two hundred doses of HPV will be administered at these two sites. Both communities have strong local champions who will coordinate media, messaging, and the event in collaboration with TMA.


The council makes the following recommendation to enable TMA to continue its commitment to reduce the preventable cancers associated with HPV.

**Recommendation:** Adoption of new TMA policy, Physician Role in Increasing Vaccination for HPV, as follows:

In an ongoing effort to reduce the burden of preventable cancers associated with human papillomavirus (HPV) in Texas, TMA will:

1. Continue to educate physicians, monitor, and support implementation of interventions to improve the rate of HPV vaccination per Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) recommendations using the following evidence-based strategies:
   (a) educate physicians, families, and patients on the key message that the HPV vaccine prevents cancer safely in women and men,
   (b) recognize that physicians are leaders within the community and are critical in improving HPV vaccination rates,
   (c) communicate that strong physician recommendation is the most important determinant of vaccine acceptance,
   (d) strengthen communication through the utilization of the principles of successful management of vaccine hesitancy, HPV cancer survivor stories, and local/regional champions, including trained community health workers,
   (e) establish consistency in the messaging over the HPV vaccine’s importance, effectiveness, and safety among all clinical/practice physicians and staff,
   (f) utilize effective vaccine delivery strategies, which include reviewing the vaccine status of all patients at all visits, and using standing orders, simultaneous administration, i.e., “bundling” the vaccine with other vaccines, and school-based clinics,
   (f) track the progress of vaccine delivery through the utilization of EHR functions, surveillance/monitoring systems, regular performance reviews, and maintaining knowledge of the trends in the rates of HPV vaccine coverage and HPV-associated cancer;

2. Support the continued testing, development, improvement, and dissemination of effective HPV vaccine intervention research and reviewing and editing policy recommendations accordingly;

3. Continue active collaborations with the Texas Department of State Health Services to optimize the use of the state immunization registry with the goal of having it be fully functional, as defined by the CDC, and utilized by physicians in order to have a reliable method to measure HPV immunization coverage rates in the state. TMA will encourage development of data sharing agreements among groups that are collecting valid HPV vaccine coverage rate data until a fully functional immunization registry is implemented; and
4. Continue to collaborate both internally and externally with health stakeholders to leverage and improve HPV vaccination rates in Texas.

Related TMA Policy:

50.008 HPV Vaccination: The Texas Medical Association will (1) promote the Centers for Disease Control and Prevention Advisory Committee on Immunization Practices recommendations on the use of human papillomavirus (HPV) vaccine; (2) provide education and assistance to clinicians on strategies for implementing HPV vaccination in their practice; (3) promote increased clinician and community awareness on HPV, and HPV-associated cancers and diseases and the scientific data supporting vaccine safety and efficacy; and, (4) work with external stakeholders to promote routine vaccination and series completion for all adolescents and young adults (CM-CAH Rep. 1-A-10; amended CM-CAH Rep. 1-A-15).

Related AMA Policy:

HPV Vaccine and Cervical Cancer Prevention Worldwide H-440.872: 1. Our AMA (a) urges physicians to educate themselves and their patients about HPV and associated diseases, HPV vaccination, as well as routine cervical cancer screening; and (b) encourages the development and funding of programs targeted at HPV vaccine introduction and cervical cancer screening in countries without organized cervical cancer screening programs.

2. Our AMA will intensify efforts to improve awareness and understanding about HPV and associated diseases, the availability and efficacy of HPV vaccinations, and the need for routine cervical cancer screening in the general public.

3. Our AMA (a) encourages the integration of HPV vaccination and routine cervical cancer screening into all appropriate health care settings and visits for adolescents and young adults, (b) supports the availability of the HPV vaccine and routine cervical cancer screening to appropriate patient groups that benefit most from preventive measures, including but not limited to low-income and pre-sexually active populations, and (c) recommends HPV vaccination for all groups for whom the federal Advisory Committee on Immunization Practices recommends HPV vaccination.

Human Papillomavirus (HPV) Inclusion in High School Education Curricula D-170.995: Our AMA will: (1) strongly urge existing school health education programs to emphasize the high prevalence of human papillomavirus in both males and females, the causal relationship of HPV to genital lesions and cervical cancer, and the importance of routine pap smears in the early detection of cervical cancer; and (2) urge that students and parents be educated about HPV and the availability of the HPV vaccine.

Sources:


4. CDC. HPV. Clinician fact sheets and guidance. www.cdc.gov/hpv/hcp/clinician-factsheet.html


Appendix A.

BE WISE — IMMUNIZE
PROTECT YOURSELF FROM CANCER

HPV vaccine prevents cancers.
• The HPV9 vaccine protects against 7 strains of human papillomavirus (HPV) that can cause cancer and 2 that cause genital warts.
• Your best defense: Get the HPV vaccination series.

It’s not too late for young adults and older teens.

Doctors recommend HPV shots in adolescence, but remember:
• Males and females can get the shots until age 26.
• 3 shots are needed for full protection if you start getting them at age 15 or older.
• The vaccine will help even if you’ve been sexually active.

HPV Facts

Human papillomavirus (HPV) is a common infection. 80% of people in the U.S. will get HPV, most as teens or young adults.

HPV usually clears up on its own, but cancers can show up years later in people infected with HPV.

HPV can cause:
✓ Cancers: cervical, throat, anal, penile, and more
✓ Genital warts

30,000+ people get cancer from HPV every year in the U.S.

Talk to your doctor or college health center about getting the HPV vaccination and any other shots you may need.

Vaccines for college students:
✓ HPV
✓ Flu shot (every year)
✓ Meningococcal (meningitis)
✓ Tdap (tetanus, lockjaw, diphtheria, and whooping cough)

Most insurance companies, the Texas Vaccines for Children Program, and the Adult Safety Net program pay for HPV vaccine.

Be Wise — Immunize is a joint initiative led by TMA physicians and medical students, and the TMA Alliance. It is funded in 2018 by the TMA Foundation thanks to H-E-B, TMF Health Quality Institute, Pfizer Inc., and gifts from physicians and their families.

Be Wise — Immunize is a service mark of the Texas Medical Association.

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Source: Centers for Disease Control and Prevention, MD Anderson Cancer Center
BE WISE — IMMUNIZE

PROTECT YOUR CHILD FROM CANCER

**HPV vaccine prevents cancers.**
- The HPV9 vaccine protects against 7 strains of HPV that can cause cancer and 2 that cause genital warts.
- Your child’s best defense: Get the vaccine in adolescence before being exposed to HPV.

**All adolescents should get the HPV vaccine.**
- Recommended for 11- and 12-year-old girls and boys.
- 2 shots before age 15 give full protection.

**Older teens and young adults can get immunized, too.**
*It’s not too late to start or finish getting the HPV shots.*
- Males and females can get the shots until age 26.
- 3 shots are needed for full protection if starting them at age 15 or older.

**HPV Facts**
Human papillomavirus (HPV) is a common infection. 80% of people in the U.S. will get HPV, most as teens or young adults.

HPV usually clears up on its own, but symptoms can show up years after getting infected with HPV.

**HPV can cause:**
- Cancers: cervical, throat, anal, penile, and more
- Genital warts
- 30,000+ people get cancer from HPV every year in the U.S.

*Talk to your child’s doctor about getting the vaccination.*

**Vaccines for your 11 & 12-year-olds:**
- HPV
- Influenza (needed every year)
- Meningococcal (meningitis)
- Tdap (whooping cough)

Most insurance companies, the Texas Vaccines for Children Program, and the Adult Safety Net program pay for HPV vaccine.

Source: Centers for Disease Control and Prevention, MD Anderson Cancer Center

Be Wise — Immunize is a joint initiative led by Texas physicians and medical students, and the TMA Alliance. It is funded by TMA Foundation thanks to major gifts from H-E-B and TMA Health Quality Institute, along with generous contributions from physicians and their families.

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