NIH NATIONAL CANCER INSTITUTE

Insights from the Cancer Control Field

Making Effective HPV Vaccine Recommendations in Kansas

Public Health Challenge

In the United States, almost all men and women get the human papillomavirus (HPV) in their lifetime. HPV infection can lead to health complications, including various cancers (e.g., penile, anal, oropharyngeal) and is the cause of nearly all cervical cancer cases. HPV is the culprit behind approximately 36,000 cancer cases each year.

The HPV vaccination series can prevent cancers associated with HPV. Still, HPV vaccine rates are low in many places, including Kansas. In Kansas, a health system's working group noticed HPV vaccination rates were below the Healthy People 2020 goal of 80%. The leaders of the working group chose to implement the evidence-based program, Making Effective HPV Vaccine Recommendations, in its health system to improve its HPV vaccine rates.

At a Glance

The Masonic Cancer Alliance (MCA), the outreach network of The University of Kansas Cancer Center, uses the Making Effective HPV Vaccine Recommendations program to improve HPV vaccination rates in its catchment area. Read this case study narrative to learn how MCA implemented the program and how it can be used in your setting.

The Setting

The University of Kansas Cancer Center catchment area includes the state of Kansas and 18 counties in Missouri. The University of Kansas Health System is a large hospital system in the Kansas City metropolitan area.

In 2017, a working group comprised of 17 providers (pediatricians and primary care physicians) in the health system came together to address low HPV vaccination rates in The KU Cancer Center catchment area. The group was interested in implementing a provider education program. Providers are a key factor in vaccine uptake. The program champion was aware of the Making Effective HPV Vaccine Recommendations through her HPV work and the Evidence-Based Cancer Control Programs (EBCCP) website. The working group selected this provider education program because it was an evidence-based approach aimed at changing providers' behavior. The University of Kansas Health System decided to focus on HPV vaccine uptake among boys and girls who were between the ages of 11 and 13.

> **"We implemented Making Effective HPV Recommendations because it was an evidence-based approach that can really change the behaviors of our providers [by getting them to recommend the HPV vaccine with their patients].**
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> **The materials are right there [available online], so prep time is fast."**
>
> **Executive Director, Masonic Cancer Alliance**

The Approach

As a first step, the working group wanted to gain a firm understanding of the current (baseline) immunization rates before starting the program. At the time, some divisions of the health system were not actively reporting HPV vaccination data. To overcome this challenge, the working group leader hired a student intern to review records to determine (1) the number of eligible people who did not get the vaccine during a visit and (2) the number of missed opportunities. A missed opportunity was defined as a visit during which an eligible patient received routine vaccinations (e.g., tetanus) but did not receive an HPV vaccine. This baseline data was used during the provider training to set the course for improvements.

Next, the working group adapted the program. Most significantly, the group reduced the required training time from the standard one hour to 20 minutes due to the providers' limited availability. The program champion acknowledged that reducing the time was not ideal but was necessary in order to implement the program.

The clinical leads of individual practices facilitated the training, which was well-received by the providers because the clinical leads were viewed as trusted peers. The clinical leads were a part of the working group and did not receive any extra training. However, the slides were prepared for them and they were coached as needed.

During the training, providers were coached on how to use the program, which involved the following: (1) Inform each patient about which vaccines they are due to receive, placing the HPV vaccine in the middle of the list; (2) if a parent declines the HPV vaccine for their child, ease their concern following the program's implementation guide; and (3) follow up with a strong recommendation to vaccinate. Providers also received vaccination rate data for the state of Kansas and their individual practice's vaccine rates.

In July and August 2018, the working group trained 13 practices (approximately 80 providers) over a period of four weeks. The implementer felt August was a prime time for HPV vaccine initiation because children typically have well-child visits and receive immunizations before they return to school.

In 2019, six different practices (117 providers) were trained during the same time of year. In this second year of training, the working group further adapted the program. This time, the training was launched with a discussion about most recent patient encounter where HPV vaccination was addressed.

Trainings were scheduled during the staff meetings. Medical assistants and nurses were required to attend, but physicians were not. The working group received positive feedback about the 20-minute training. Many of the attendees reported that the training was helpful, and they wanted to learn more about HPV.

More importantly, after implementing the Making Effective HPV Vaccine Recommendations program, The University of Kansas Health System saw decreases in rates of missed opportunities and increases in HPV vaccine uptake. The program is still in use, and program champions at each clinic re-train providers yearly during their scheduled staff meetings.

Challenges and Lessons Learned

Accessing and Understanding Your Data

The implementers initially had a challenge accessing their data, as some divisions of The University of Kansas Health System were not actively reporting HPV vaccination data. They knew the importance of having the baseline data prior to implementing the Making Effective HPV Vaccine Recommendations program, so they hired a student intern to determine their baseline vaccine rates. Understanding the baseline vaccine rates in your health system will help you identify missed opportunities and areas for improvement. When providers know their data, it helps them to change their behavior and improve their vaccination rates. As you implement the program, you should continually update the HPV vaccination data and share it with your local providers.

Using Provider Alerts

The University of Kansas Health System began using automated provider alerts that remind providers when their patients' vaccines are due. Alerts are generated automatically in the electronic medical records and the alert displays when a patient is scheduled for their office visit. Providers were trained to offer the HPV vaccine when they see the alert.

Collaborating with Stakeholders

Collaborating as a working group or coalition allowed The University of Kansas Health System to implement the program on a larger scale. Using credible stakeholders—the clinical leads—to facilitate the training also helped to further improve vaccination rates.

Questions and Answers

What tips would you give for implementing the Making Effective HPV Vaccine Recommendations program?

Get to know your audience. As an icebreaker, ask, "Who gave an HPV vaccine this week?" The answers to this question can give the facilitator (clinical lead) insight into your providers' current practices and highlight room for improvement. Additionally, a dialogue with your providers can help the facilitator identify organizational myths. This is an opportunity to address false information and remove any systemic barriers to recommending the vaccine.

What was the biggest cost in implementing the Making Effective HPV Vaccine Recommendations program?

You can use the program in your setting at a relatively low cost. In this case, food was the largest overhead cost because the implementer provided lunch as an incentive to increase attendance rates.

Find Out More

To learn more about Making Effective HPV Vaccine Recommendations and how to use the program at your organization, view the program summary at: https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=26926144

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About EBCCP

The Evidence-Based Cancer Control Programs (EBCCP) website has a searchable database of programs, plus resources that planners and public health practitioners can use to help prevent cancer and support cancer survivors and their caregivers in community and clinical settings.

EBCCP is the recently refreshed version of Research-Tested Intervention Programs (RTIPs). The new website includes improved navigation and search capabilities, case study narratives, program summaries, and more. Visit us at **ebccp.cancercontrol.cancer.gov** for the latest resources today!