

Giving It A Shot: An Interprofessional Program to Improve Human Papilloma Virus (HPV) Vaccination Rates in a Health Center Setting

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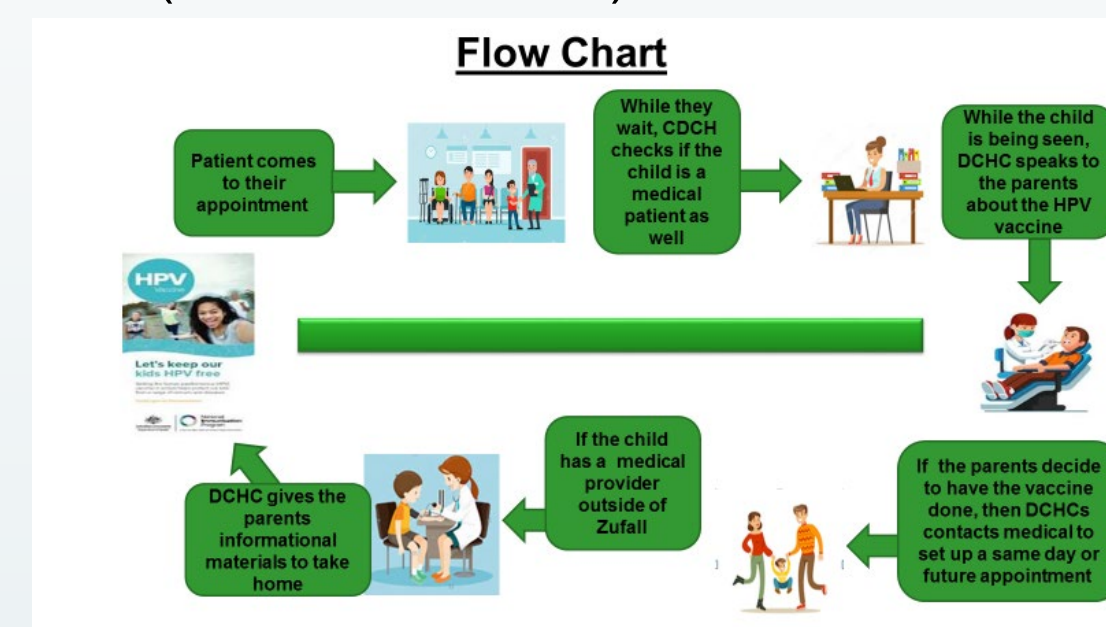
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Abstract

Oropharyngeal cancer is the fastest growing HPV-related cancer. At Zufall Health Center, an FQHC in northwest New Jersey, HPV vaccination rates are at NJ state average (45%) but under the desired goal of 80% nationally. Eight Community Dental Health Coordinators (CDHC) were included in a project to improve Zufall's HPV vaccination rates for a cohort of both both medical and dental patients. CDHCs developed interdisciplinary dental-medical workflows, participated in the development and implementation of an HPV vaccine referral protocol and implemented strategies such as enhancing provider and staff education, increasing patient and staff engagement and improving clinic flow and data collection. After 10 months of project implementation, we saw a significant improvement in HPV vaccine completion rate from a baseline of 12.13% for the selected subgroup at the start of the project to 42.16% to date.

Methodology

Zufall employed and trained 8 CDHCs with the goal to improve HPV vaccine rates. The project focused on developing interdisciplinary dental-medical workflows. CDHCs participated in the development and implementation of a multipronged, HPV vaccine referral protocol. (See chart below.)

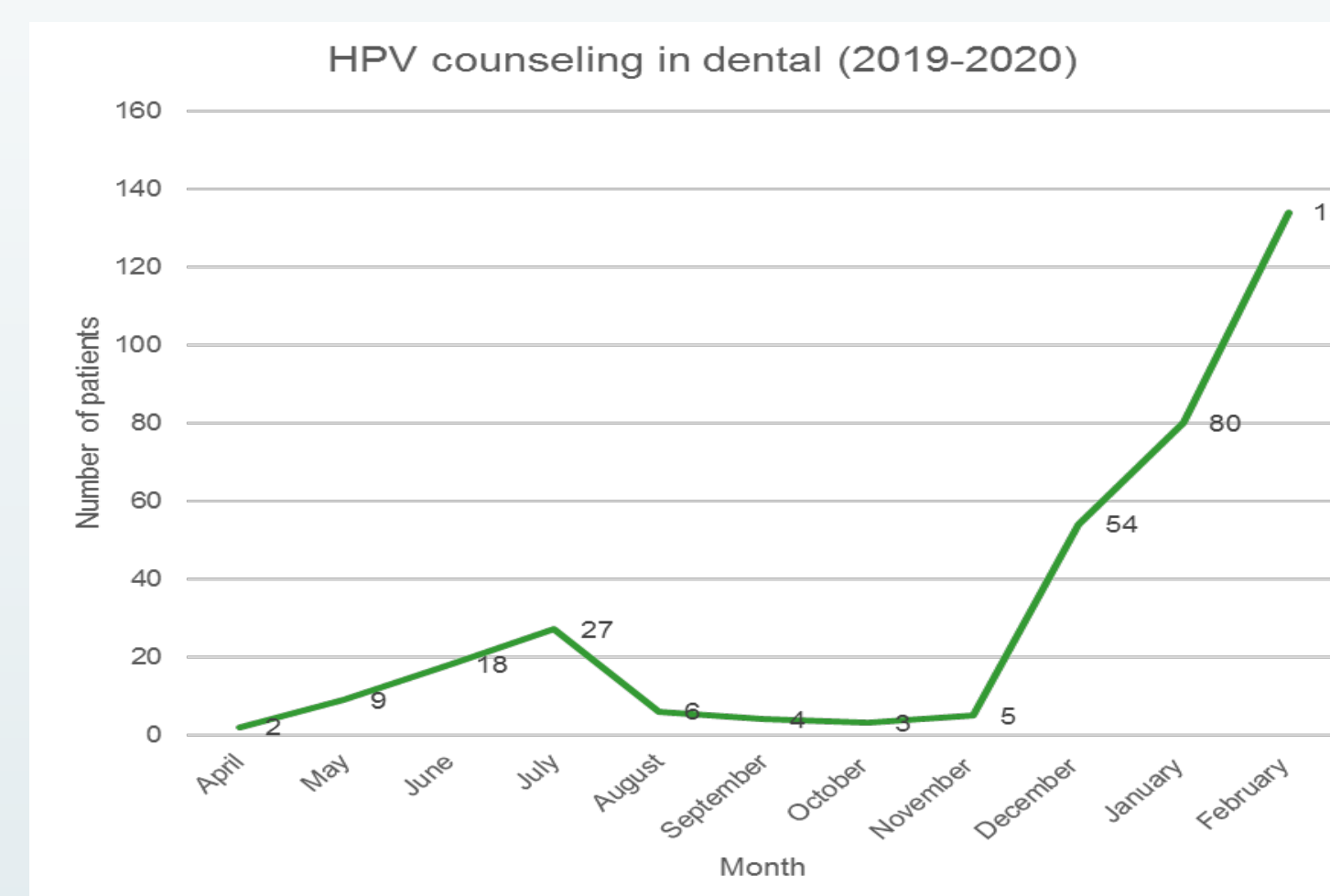


Other tools included the Model for Improvement, Plan Do Study Act (PDSA) steps of change, Motivational Interviewing, staff trainings and a new data dashboard.

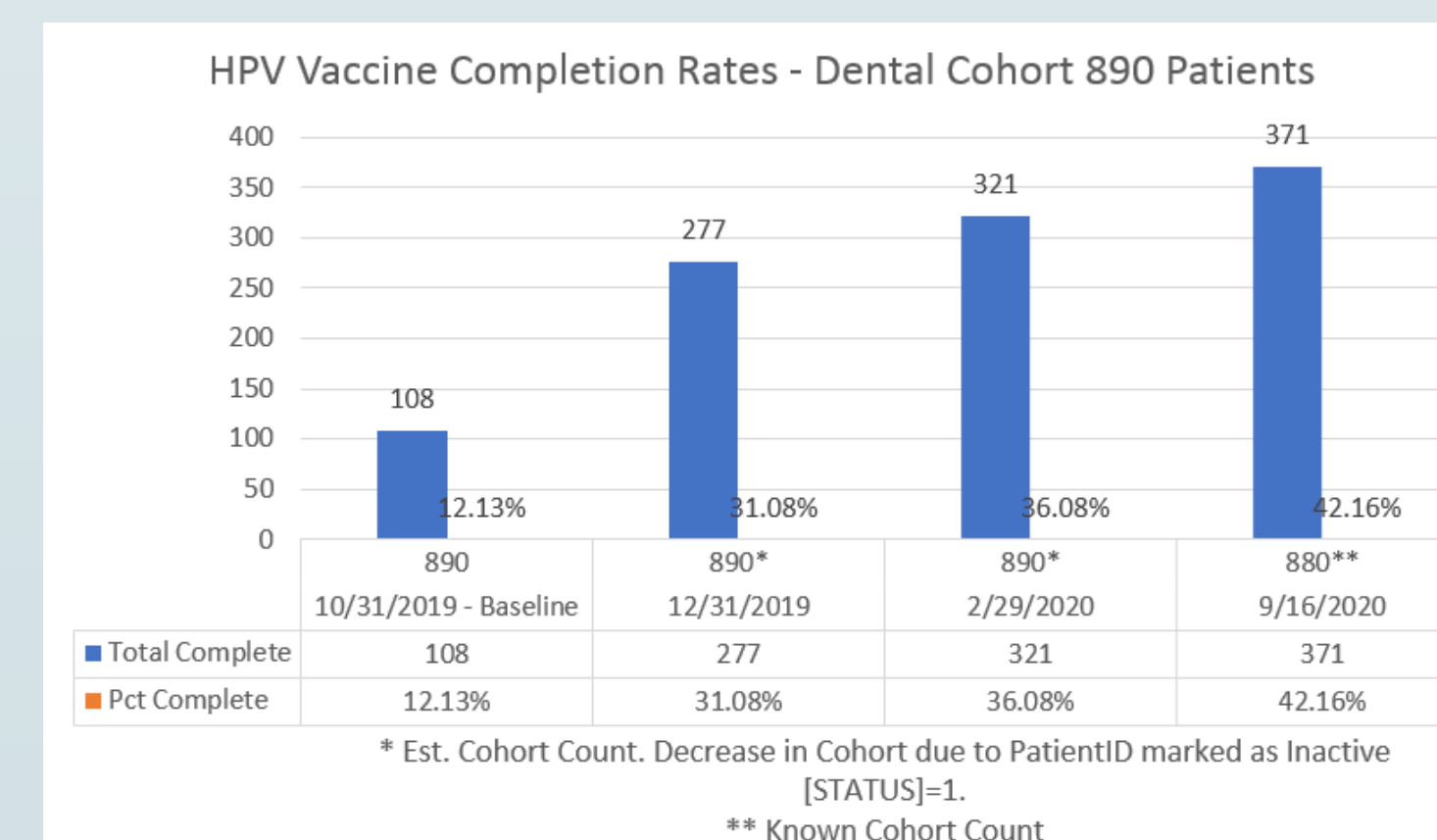
- CDHCs were involved in PDSAs, starting small and testing one process change at a time. CDHCs assessed the impact of each process, and then refined before enlarging the scope to other dentists and patients at additional sites.
- Patient/family engagement was vital. Using Motivational Interviewing (MI), the CDHCs found that messaging HPV infection as a risk for oral cancer was more acceptable to parents of young children.
- Staff trainings took place with resources from the ADA, TeamMauree.org and other partners. Trainings included CDHCs, Patient Centered Medical Home Coordinators (PCMH) in medical, and support staff. Every team member was prepared to explain the importance of HPV vaccination to parents.
- After the initial step of validating the data, a dashboard was created consisting of demographic information, current vaccination status and site data. The new HPV dashboard dynamically captured dental and medical outcome metrics, allowing for daily monitoring of progress by site.

Results

From April 1, 2019 through January 1, 2020, Zufall expanded the project from one site to multiple sites. CDHCs made an average of 15 case management calls per week to schedule patients for concurrent HPV vaccination and recall visits. Additionally, chairside HPV counseling sessions increased steadily, as seen in the graph below.



At the start of the project, baseline HPV vaccine completion rate in the cohort was 12.13%. We saw a significant progression in vaccination rates to 36.08% as of February. As of mid- September, vaccination rates in the cohort have risen to 42.16%. See graph below.



Conclusion

CDHCs, with their unique skill set, service orientation, and dental expertise, were a significant driver to the success of the project. At Zufall, their role was expanded from facilitating patients' access to dental care to providing education and arranging medical visits to increase HPV immunization rates. In addition to being the concierges of the dental experience, they helped young patients and their families navigate the system to improve access to vaccination. CDHCs guided patients through the process and reminded them of the impact of the immunization on the young patient's current and future medical and oral health.

Key findings guided the project:

- Changing the HPV vaccination conversation from sexual activity to oral cancer prevention was very effective.
- Discussing HPV vaccination and oral cancer prevention in the dental home by CDHCs, the trusted facilitators of the project, was also effective.
- Cancer prevention was a strong motivator for both our dental and medical teams.
- The project can be replicated in other community health centers and health care systems.

The unique combination of team integration, a rigorous process improvement system, an accurate reporting system, and putting real faces to the project (CDHCs, with their counterpart PCMHs) resulted in nearly tripling the baseline vaccination rate. We were able to increase HPV immunization rates by enhancing collaboration between medical and dental teams, unifying them with a compelling message and a shared goal.

Acknowledgements

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