

RATIONALE/NEED

- HPV is a common sexually transmitted infection that is the leading cause of cervical, vaginal, vulvar, penile, anal, and oropharyngeal cancers ^a
- The HPV vaccine series can prevent 90% of these cancers from developing if given before exposure to the virus ^b
- The rate of teens fully vaccinated against HPV in the US remains below 50% ^c
- The AAP recommends starting the series between 9-12 years of age,^a but most clinics (including ECU Pediatrics) have typically begun offering the vaccine to patients at age 11
- Patients were 22 times more likely to complete the HPV vaccine series if they started at age 9 or 10 instead of 11 or 12 ^d
- The aim of this project was to improve the rate of ECU pediatrics patients who initiate the HPV vaccine at age 9 or 10 to 50%

METHODS

- A modified version of the "Parent Attitudes about Childhood Vaccines Survey" was administered to parents of children ages 9-18 prior to any interventions
- 4 PDSA cycles completed:
 1. Nursing staff was educated on best practices for effectively counseling parents about HPV vaccine
 2. Visual reminders were posted for office medical assistants to mark 9-10 year-old patients as being due for the HPV vaccine
 3. Pediatric residents underwent brief education on vaccine counseling and rationale for initiating at younger ages
 4. Flyers visible to patients and providers were posted on exam room doors
- Percentage of the clinic's 9-10 year-old patients who initiated the HPV vaccine series was obtained through the North Carolina Immunization Registry
- Percentage of 9-10 year-old well visits that documented offering and/or giving HPV vaccine obtained in manual chart review

RESULTS

Figures 1 & 2: Results of parental surveys prior to interventions

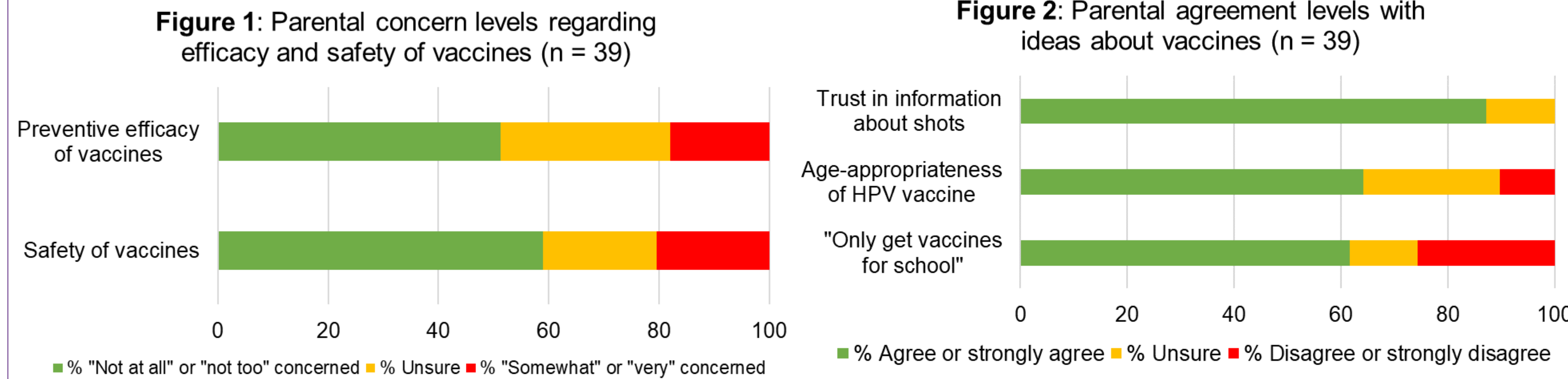


Figure 3: Initiation of HPV Vaccine in all 9-10 Year Olds affiliated with clinic per state registry data

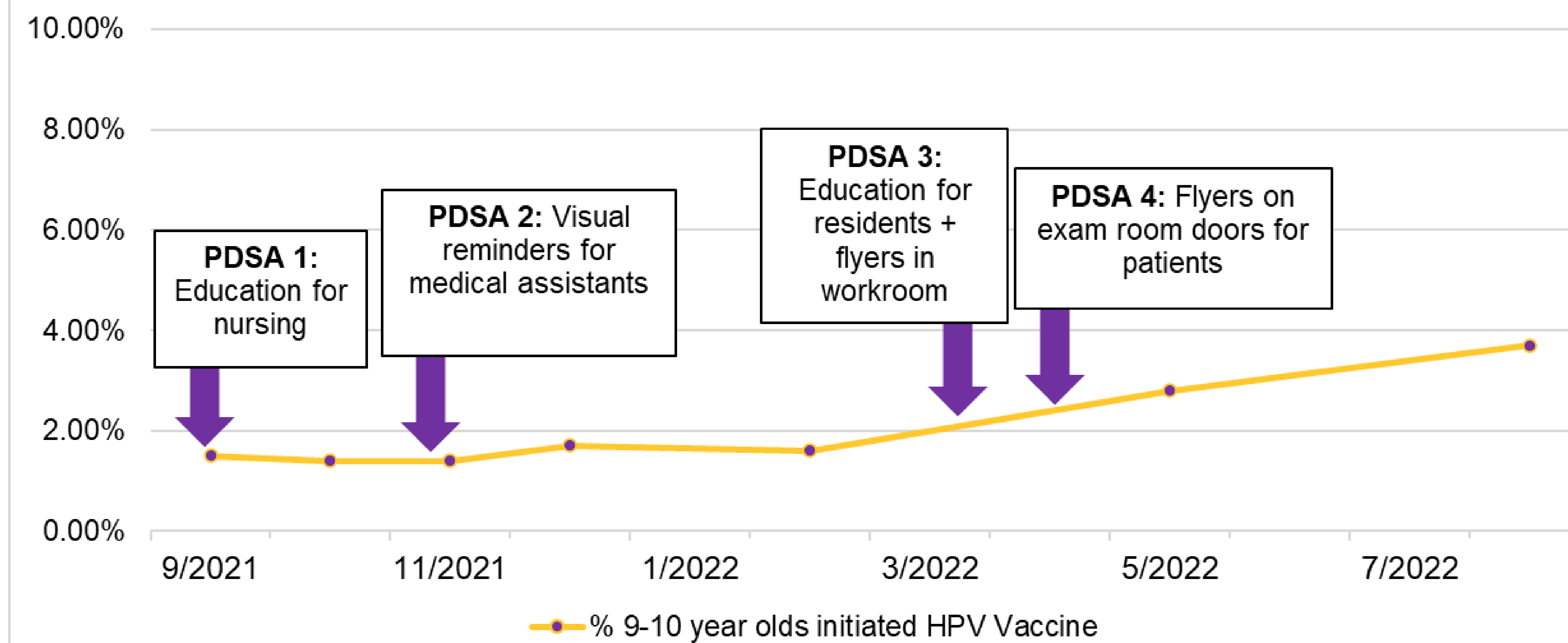


Figure 4: Percent of week's 9-10 year-old visits offered HPV vaccine per chart review

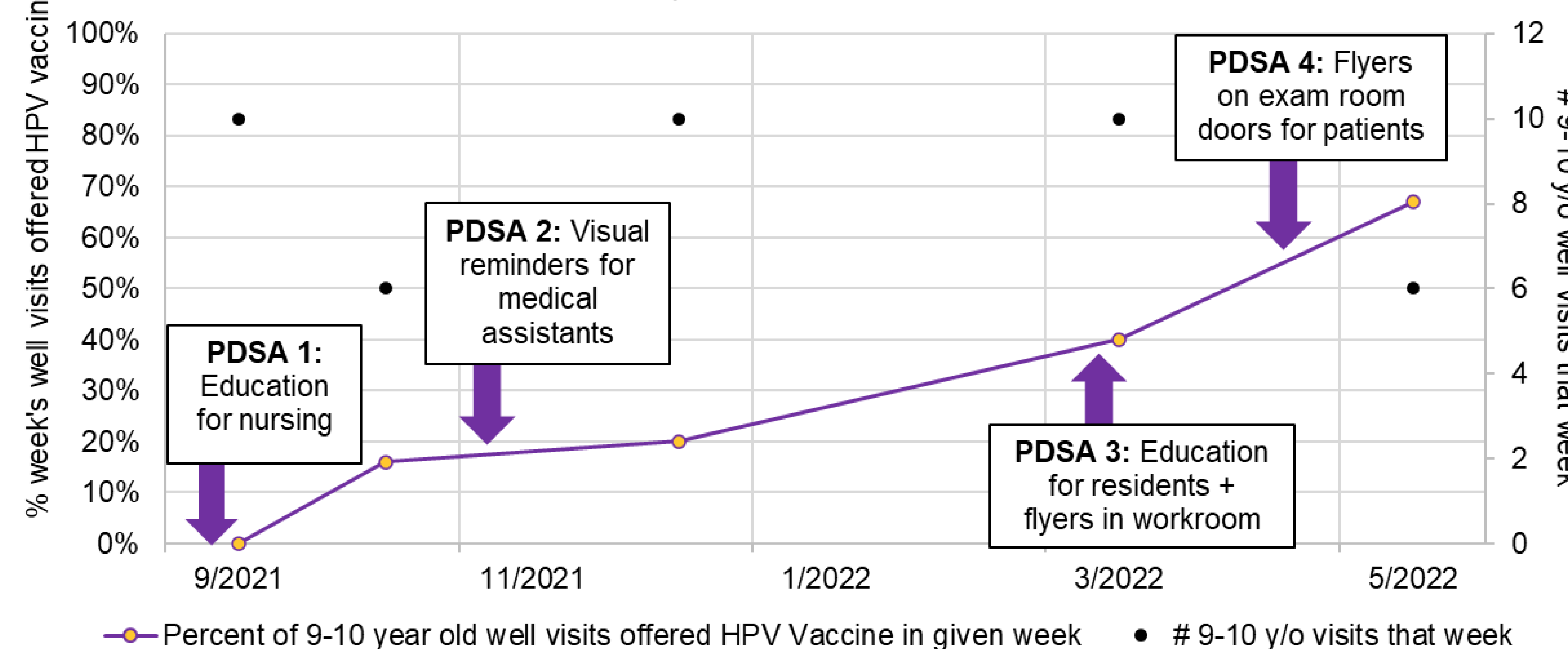


Table 1: Comparing HPV vaccination initiation in 11-year-old patients in 2020 (before project) vs 11-year-old patients in 2022 (after project)

Birthdate range	Date of evaluation	# initiated HPV vaccine	# patients	% initiated HPV vaccine
8/18/08 – 8/17/09	8/17/2020	333	1711	19.5%
8/18/10 – 8/17/11	8/17/2022	362	1486	24.4%

IMPACT/LESSONS LEARNED

- Failure to offer the vaccine, rather than parents declining the vaccine, was the primary limiting factor of the impact
- Even before educational interventions, parents had largely positive views of HPV vaccine and immunizations in general
- Minor interventions can modestly improve the overall HPV vaccination initiation rate in 9-10 year-olds in a manner that should substantially increase completed HPV vaccination rates as they age into teenagers
- By involving all team members in the clinic in the project, culture of offering HPV vaccine to 9-10 year-old patients gradually became common practice
- Altering the state's immunization registry to automatically flag children as "due" for the HPV vaccine starting at age 9 could be the intervention with the most potential for impact statewide

REFERENCES

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