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## INTRODUCTION

- HPV is strongly associated with cervical cancer and cancers of vagina, vulva, penis, anus, rectum.
- HPV related cancers can be prevented with vaccination
- In 2019, WHO identified vaccine hesitancy as top 10 global threats and planned to increase the HPV vaccine coverage.
- In June 2019 Advisory Committee on Immunization Practices (ACIP) in US recommended shared clinical decision-making regarding HPV vaccinations in adults aged 26 through 45 years.
- The goal of this project is to evaluate the uptake of HPV vaccination and challenges in the HIV patients at Beaumont Hospital.

## METHODOLOGY

- The study included HIV+ patients who received care in the Infectious Disease Clinic at Beaumont Hospital
- Participants were identified by review of the appointment list to identify male and female HIV patients of age 18-45.
- Study participants either had received the HPV vaccination or were not vaccinated to date
- Participants were provided with a questionnaire on HPV vaccine as part of routine care and recorded in their medical charts
- Anecdotally patients in this clinic were not routinely offered the HPV vaccine prior to implementation of this student-led QI project.
- Through a retrospective chart review the results of 9 items questionnaire, demographic data and HPV vaccination uptake, were analyzed from August 2019 to December 2020.

## RESULTS

- Thirty-two participants completed the questionnaire
- 12 participants confirmed interest in receiving vaccination and 9 subsequently received the HPV vaccination at the time of analysis (Figure 1).
- Of note, two other participants had received vaccination previously.
- 78% of the participants were males and the mean age of the participants was 33.6 years (SD: 5.6) (Table1).

**Table 1: Demographic Data and Responses to the HPV Questionnaire (N=32)**

Age Mean (SD)	33.6 years (5.92)
Gender Male (%)	25 (78%)
Race (%)	Caucasian (34.4%), African American (56.3%), Other (9.3%)
Are you aware of the virus that causes genital warts, cervical cancer?	Yes (87.5%), No (9.4%), Don't Know (6.3%)
Are you aware that HPV-related cancers are preventable?	Yes (89.7%), No (10.3%), Don't Know (0%)
Are you aware that a vaccine for HPV is available	Yes (82.8%), No (13.8%), Don't Know (3.4%)
Do you know if your insurance covers the HPV vaccine?	Yes (34.5%), No (24.1%), Don't Know (41.4%)
Did you receive Influenza vaccine	Yes (46.7%), No (43.3%), Don't Know (10%)
Would you be interested in talking about HPV vaccine	Yes (42.9%), No (42.9%), Don't Know (14.2%)
If you have not been vaccinated would you like to get vaccinated today	Yes (42.3%), No (42.3%), Don't Know (15.4%)

**HPV Questionnaire distributed to clinic patients (paper)**

Human Papilloma Virus (HPV) Immunization Questionnaire  
\*\*\*Only for Individuals Age 18-45\*\*\*

Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Date of Visit: \_\_\_\_\_

	Yes	No	Don't Know
Are you aware of the virus that causes genital warts, cervical cancer?			
Are you aware that the HPV affects both men and women?			
Are you aware that HPV-related cancers are preventable?			
Are you aware that a vaccine for HPV is available?			
Do you know if your insurance covers the HPV vaccine?			
Did you receive Influenza vaccine?			
Would you be interested in talking about HPV vaccine?			
If you have not been vaccinated would you like to get vaccinated today if you qualify?			

**Reason for Vaccine Refusal**

\_\_\_ The vaccine is too costly

\_\_\_ I am unsure if the vaccine will be covered by my insurance

\_\_\_ The vaccine is not safe

\_\_\_ I do not trust the efficacy of vaccines

\_\_\_ I think this vaccine encourages risky sexual behavior

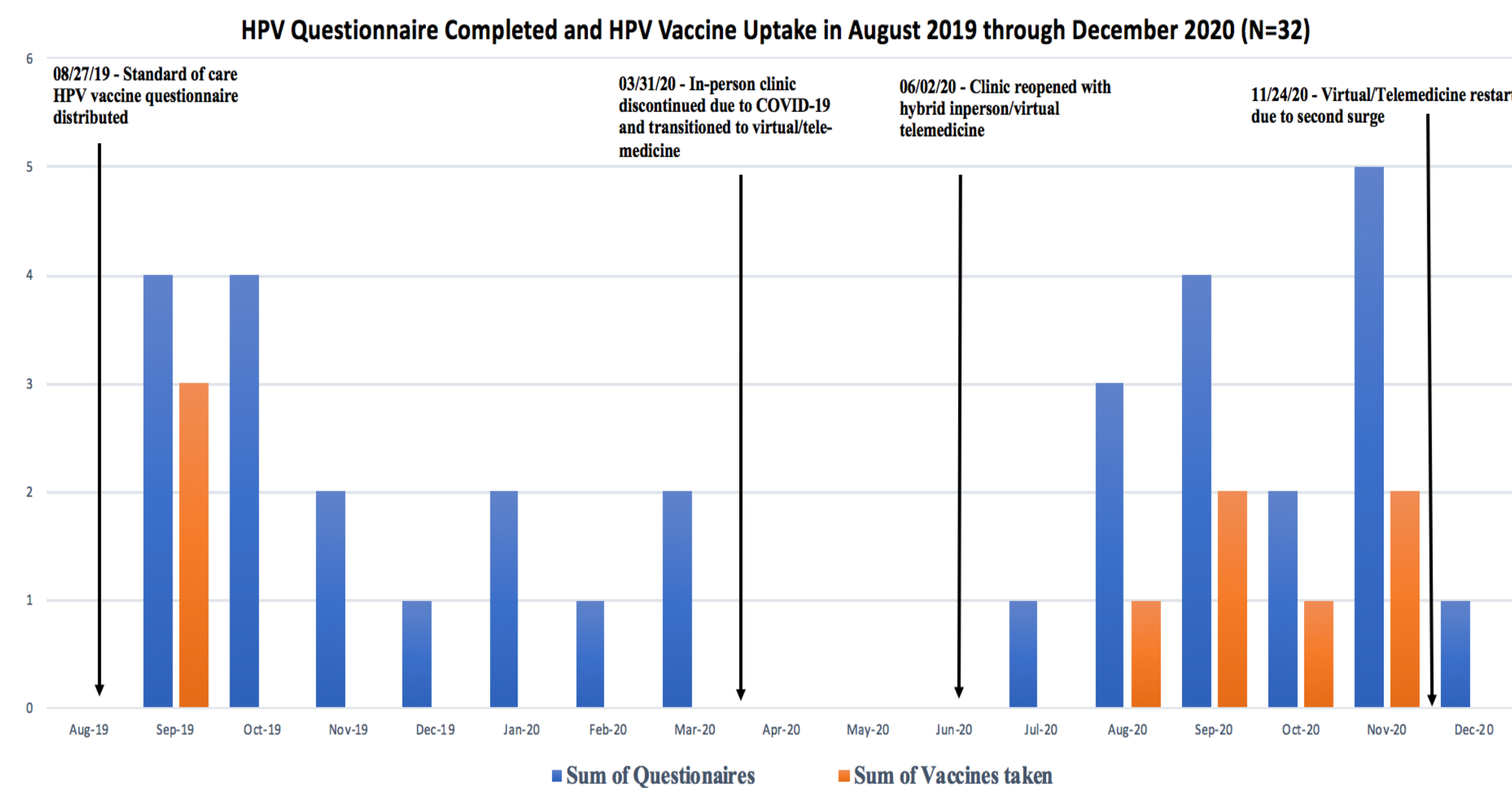
\_\_\_ I do not know where or how to access the vaccine

\_\_\_ I do not have sufficient information about HPV yet

\_\_\_ Afraid of multiple injections

\_\_\_ Other: \_\_\_\_\_

**Figure 1**



## CONCLUSION

- The study highlighted the need for patient-provider discussions to improve HPV vaccination uptake, understand insurance coverage and patient's perception of the vaccine cost to optimize HPV vaccine uptake

## LIMITATIONS

- The study was limited by transition to tele-medicine clinic during COVID19 pandemic surge in 2020.
- The limitations of this study include that it is not prospective and may have a relatively small sample size in comparison to other studies performed previously answering similar questions in different population.
- Although the study will be powered to detect the importance of HPV vaccine in HIV patients through age 45, a larger sample size could improve our study's impact.
- Furthermore, certain variables such as sexual activity, education level, yearly income, employment status and homelessness are not recorded in the medical records of the participants therefore these potential barriers are not considered part of the study

## REFERENCES

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